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SOME NEEDS OF AMERICAN COMMERCE.

AMONG the many remarkable changes in national affairs which have taken place during the progress of the nineteenth century, few are more striking than that which has occurred in the position achieved by the United States, with reference to other nations, since the early part of this period. In the year 1800 our population was less than five and a half millions. Now it is not less than sixty-five millions. Then our area included but a narrow strip of territory on the Atlantic Ocean, between Nova Scotia and Florida, amounting to eight hundred and twenty thousand six hundred and eighty square miles. Now it includes the entire continent between Canada and the Gulf of Mexico and between the Atlantic and the Pacific Oceans, aggregating three million five hundred and fifty-nine thousand and ninety-one square miles. Then we were struggling for a national existence; now it is conceded that we occupy a prominent position among the most powerful nations of the world. Our industrial development has been not less remarkable, but of this it is not my purpose now to speak, except in so far as that may relate to our commercial interests. Speaking politically, however, the present attitude of our country with regard to other nations offers a still more forcible contrast. The Monroe doctrine, now very properly obsolete, was a popular one in the earlier years of the republic and of the century. It was then considered advisable that our national government should have as little as possible to do with other governments, more particularly with those of the Eastern Continent. A policy of exclusiveness or of non-intervention was at that time favored as being best calculated to advance the interests and promote the prosperity of our young republic. Our policy was one of

peace, and it was not considered wise to run the risk of becoming involved in wars in which our interest might be very slight. Besides, we were making experiments in self-government, or in the art of conducting our political affairs on sound and correct republican principles, and we could not afford to jeopardize the success of those experiments by "entangling alliances" with governments organized on a different basis and maintained on other principles. These experiments having been successfully carried out, and our growth in wealth and population having been so extraordinary as to be without precedent, we have reached a point in our history where we are obliged to take an influential and commanding position among the leading nations of the world, and this place we *must* take, whether we desire to do so or not, in the interests of humanity and in defense of the principles of republicanism. It becomes a matter of duty which we must consider with the utmost seriousness and in the most conscientious manner, for this reason, among many others, that the friends of republican institutions throughout the world very properly look to us to give them the benefit of our position and strength, and in the interests of our common humanity we must so exercise our influence that these interests shall be maintained and promoted in the highest possible degree. To accomplish this purpose it is not necessary that we should antagonize other nations, but simply that we should use the power and influence we possess in the preservation of peace and in the development of the industrial arts among the nations of the earth, and to the end that, as far as possible, the difficulties which may arise between different nations may be settled without an appeal to the sword. Without going to war we may do much to encourage people everywhere to find their most successful methods of securing individual and national progress, happiness, and prosperity not by means of standing armies, but through the agency of free schools, a free press, and the other methods so successfully employed in our own country for the promotion of these desirable ends.

The vast increase in the facilities of travel and transportation and the greatly multiplied means of intercommunication between the various sections and nationalities of the world in recent years have not only made the exercise of this influence much easier, but they have at the same time increased the necessity for it, and have made it absolutely imperative that we should take the position to which we are so clearly entitled by virtue of our geographical location, our wealth, population, and abundant natural resources, and, more than all, by the fact that the principles upon which our government is founded are those which are best calculated to secure both individual and national prosperity. The attainment of this object is still further assisted by the rapid increase in the use of the English language in the transaction of all kinds of business throughout the world. We are encouraged not only

by the fact that one hundred and twenty-five millions of people now make constant use of this language, but also by the other fact that among almost all nations, without regard to their native tongue, a large amount of business is carried on in the English language, and that this language is coming more and more into general use everywhere through schools and other educational facilities made use of for the training of rising generations. A knowledge of the English language is now largely considered an absolute necessity, more especially for commercial purposes.

In further promotion of the object herein suggested, the increase, in recent years, of our naval force is a step in the right direction. This increase, however, is not by any means so great as it should be, and the incidents occurring of late years in Chile, in Brazil, in Samoa, in Behring's Sea, in Hawaii, in Armenia, to say nothing of the situation in China and Japan, are but indications of our rapidly-growing needs of a navy of ample strength to meet such contingencies. At the time of the war between China and Japan it was of very great importance that we should have a larger naval force in Oriental waters than we then had there. European powers were thoroughly alive to the situation there, and the result was that there were then in those waters twenty-seven British, fifteen French, sixteen Russian, and four Italian war-ships, whilst we, who are profoundly interested in that part of Asia in view of future commercial possibilities with five hundred millions of people, had but eight war-vessels, and some of these were of inferior class and capacity. In the Hawaiian Islands, although the situation there is of very great interest to us because of their commercial value and because of the desire on the part of many of their inhabitants to be annexed to the United States, we have not now a single war-vessel to protect our interests.

It is not to my purpose at this time, however, to invite attention to the necessity which exists, great though it be, for continued and extensive additions to our navy, but rather to ask the careful consideration of those who are interested in the prosperity of our country to some of the needs of our commerce. It is a well-known fact that few nations, in either ancient or modern times, have become permanently great and prosperous without maintaining, fostering, and protecting large commercial interests. In modern times all the leading nations of the world, except our own, have carefully guarded and encouraged their shipping industries, their commercial interests, and their trade and navigation upon the high seas. Yet no nation on earth is so highly favored as our own in the possession of extensive shore-lines on both the Atlantic and Pacific Oceans, of magnificent harbors on these shores, and of an unlimited supply of those natural resources requisite for the construction of ships of all descriptions, whether of iron, steel, or wood, together with the best skilled labor in the world in ample

supply for the preparation and manipulation of this raw material, in all its forms, for ship-building purposes. To these great advantages should be added the fact that we have an enormous amount of commerce, to be more particularly referred to later on, which should be carried in American ships, but unfortunately for us, almost all of it is dispatched or received in foreign vessels.

Under the circumstances it certainly seems to be passing strange that the opportunities we have in commercial lines should not hitherto have been used to better advantage. No nation has ever become great which depended solely upon agriculture, or, indeed, upon any one industry. It is an old saying that we "should not put all of our eggs in one basket." It is true that our agricultural interests have been largely and fortunately supplemented by our manufacturing industries. With the threefold support, however, of agriculture, manufactures, and commerce our national prosperity would be assured. If all of these great interests were properly protected and encouraged, there need be no unemployed labor in our country, our natural resources of raw material would be developed and utilized, our artisans and mechanics would be profitably engaged, and the shipping profits which now go to foreign countries would be kept at home.

The profits of transportation are often greater than those of production. It is said that of the many millions of bushels of wheat shipped to foreign countries from the United States in 1893, not a bushel was carried in an American ship. Yet our mines and forests are full of the best material in the world for ship-building purposes, and we have workmen equal if not superior to those of the nations who are the world's carriers of commerce and whose shipping industries are vastly greater than our own.

The world's carriers usually become the world's bankers,—that is to say, those who control its commerce not only derive great profits from their commercial operations but they are often enabled by the position they occupy to dictate prices and to say how much shall be realized by the producer and how much by the carrier. The complaint is often heard that prices are regulated in the city of London, instead of New York or elsewhere, but when we know or remember that eighty-seven per cent. of our commerce, large as it is, is carried in British ships, and that London is the commercial and trading centre of the world, controlling a large part of its shipping as well as its banking capital, our surprise will be very materially lessened.

In order that we may be able more fully to comprehend the magnitude of the commerce of our country, it may, perhaps, be well to note an official statement of this commerce for the past thirty-three years. The following very interesting table, compiled by the Bureau of Statistics of the Treasury Department at Washington, at the request of the *Bulletin of the Iron and Steel Association* shows the imports

and exports of the United States in each fiscal year ended June 30, from 1861 to 1893. The phrases "net imports" and "domestic exports" indicate that all merchandise and gold and silver coin and bullion imported and re-exported are excluded from the table. The third column shows the difference between the net imports and domestic exports of merchandise, and the last column shows the difference in the movement of gold and silver. A plus mark before the amount indicates that the balance of trade was in favor of the United States; a minus mark indicates that the balance of trade was against this country.

Year ended June 30.	Merchandise—Gold Value.			Gold and Silver.		
	Net Imports.	Domestic Exports.	Excess of Imports or Exports.	Net Imports.	Domestic Exports.	Gold and Silver Balance.
1861	$274,656,325	$204,899,616	—$69,756,709	$40,848,401	$23,799,870	+$16,548,531
1862	178,330,200	179,644,024	+ 1,313,824	10,572,063	31,044,651	— 20,472,588
1863	225,375,280	186,003,912	— 39,371,368	1,421,056	55,993,562	— 54,572,506
1864	301,113,322	143,504,027	—157,609,295	8,192,633	100,473,562	— 92,280,929
1865	209,656,525	136,940,248	— 72,716,277	6,784,970	64,618,124	— 57,833,154
1866	423,470,646	337,518,102	— 85,952,544	7,299,395	82,643,374	— 75,343,979
1867	381,041,764	279,786,809	—101,254,955	16,178,299	54,976,196	— 38,797,897
1868	344:873,441	269,389,900	— 75,483,541	4,150,241	83,745,975	— 79,595,734
1869	406,555,379	275,166,697	—131,388,682	5,585,462	42,915,966	— 37,330,504
1870	419.803,113	376,616,473	— 43,186,640	12,147,315	43,883,802	— 31,736,487
1871	505,802,414	428,398,908	— 77,403,506	7,231,395	84,403,359	— 77,171,964
1872	610,904.622	428,487,131	—182,417,491	6,664,395	72,798,240	— 66,133,845
1873	624,689,727	505,033,439	—119,656,288	10,777,909	73,905,546	— 63,127,637
1874	550,556,723	569,433,421	+ 18,876,698	21,524,187	59,699,686	— 38,175,499
1875	518,846,825	499,284,100	— 19,562,725	12,625,704	83,857,129	— 71,231,425
1876	445,938,766	525,582,247	+ 79,643,481	9,469,070	50,038,691	— 40,569.621
1877	438,518,130	589,670,224	+151,152,094	27,746,915	43.134,738	— 15,387,823
1878	422,895,034	680,709,268	+257,814,234	23,143,074	27,061,885	— 3,918,811
1879	433,679,124	698,340,790	+264,661,666	12,853,594	17,555,035	— 4,701.441
1880	656,262,441	823,946,353	+167,683.912	85,289,284	9.347,893	+ 75,891,391
1881	624,213,229	883,925,947	+259,712.718	105,395,594	14,226,944	+ 91,168,650
1882	707,337,049	733,239,732	+ 25,902,683	36,535,182	43,480,271	— 6,945,089
1883	703,565,144	804,223;632	+100,658,488	18,292,239	21,623,181	— 3,330,942
1884	652,148,936	724,964,852	+ 72,815,916	20,518.514	50.225,635	— 29,707,121
1885	562,020,520	726,682,946	+164,662,426	25,386,908	24,376,110	+ 1,010,798
1886	621,875,835	665,964,529	+ 44,088,694	18.054,363	51,9 4,117	— 33,869,754
1887	679,159,480	703,022,923	+ 23,863,443	46,383,441	22,710.340	+ 24,173,101
1888	711,864,711	683,862,104	— 28,002,607	46,119,307	33,195.504	+ 12,923,803
1889	733,012,886	730,282,690	— 2,730,277	12,536,534	80,214,994	— 57,678,460
1890	776,775,553	845,293,828	+ 68,518,275	17,610.095	35,782,189	— 18,172,094
1891	832,705,669	872,270,283	+ 39,564,614	26,279,070	98,973,265	— 72,694,195
1892	812,856,325	1,015,732,011	+202,875,686	46,735,072	60,086,418	— 13,351,346
1893	941,076,128	830,790,730	—110,295,398	20,578,648	125,629,178	—105,050,530

The enormous volume of the foreign commerce of our country may, in some degree, be realized by a careful study of this table. If it were carried on in American ships, built in the United States by our own workmen, and from our own materials, of which we have such an abundant supply, the prices of many of our products would not be dictated, so entirely, by the city of London. This commerce might be carried on in our own vessels if our shipping industries were as great in proportion to our population as they were in the early days of the republic, when, in the picturesque language of Edmund Burke, our "ships were toiling in every sea on the habitable globe."

In recent years there has been much discussion of the causes which have brought about the great decline in American shipping, and many proposals and suggestions have been made of methods which should

be adopted for its restoration. Of these it is not now my purpose to take especial notice, but I desire to call attention to the fact that the leading maritime nations of the world find it to their interest to pay large subsidies to merchant vessels for mail services. I am well aware that subsidies for any purpose whatever, are not popular in the United States, owing to the results of unwise legislation with regard to subsidies in the past, but the experience of other nations ought to be valuable to us on this subject, and it might be well to examine carefully the results of the policy which they have pursued, with the view, perhaps, of profiting by their example. The following statement shows the amount of subsidies paid for mail services together with the aggregate of the foreign commerce of the countries therein named.

	Subsidies paid.	Foreign Commerce.
France	$5,217,565	$1,500,000,000
Germany	10,000,000	1,565,000,000
Great Britain	3,325,000	3,700,000,000
Russia	2,250,000	555,000,000
Italy	2,000,000	910,000,000

The large subsidies paid by France and Germany are evidence of the efforts they are now making to contest the commercial supremacy of Great Britain, and of the importance they attach to the building up of their mercantile industries on the ocean. The policy of paying subsidies has long been pursued by Great Britain and the result is that practically she now owns more than one-half or, to be precise, fifty-six per cent. of the sea-going tonnage of the entire world. The subsidies she is at present paying are, however, nearly covered by the mail receipts on foreign and colonial postage. In 1893 the tonnage owned by Great Britain amounted to 9506 sailing vessels collectively measuring 3,602,546 tons, and 5588 steamers of 8,912,522 tons.

Strange as it may appear, Germany stands next in steam tonnage, owning 765 ships, aggregating 1,091,472 tons. The policy of Great Britain has not only enabled her to increase her shipping industries and operations immensely, but as she thus secures control of the mail service, she, at the same time, largely increases her mercantile and banking business, because merchants all over the world prefer to do their trading where the mail facilities are of the best character. Her steamers everywhere make it a point to accommodate their arrivals and departures to the convenience of the mail service. It is not unusual for English steamers to wait a day or two in foreign ports for the mails in order that British merchants may get the benefit of mercantile orders.

The nations above referred to not only pay large subsidies for mail service, but they pay liberal bounties in the form of mileage subsidies for the construction of what are known as "reserve cruisers,"—that is, ships which may be chartered and used by their respective governments in time of war. The premiums paid in this way by the French gov-

ernment from 1881 to 1890 have averaged $1,490,000 per annum. Great Britain pays to the Peninsular and Oriental Company mail and mileage, $1,700,000 per annum. France pays the Messageries Maritimes, $2,770,000, and the Compagnie Generale Transatlantique, $2,131,600. Germany pays the North German Lloyd's Company $1,900,000 per annum. The several amounts received by other companies under these governments are not now at hand. The Austrian Lloyd's Company receives $650,000 a year. The White Star and Cunard Companies receive payment from the English government for those of their vessels which are placed on the list of "reserve cruisers." The "Teutonic" and the "Majestic" are paid by the Admiralty about $3100 a voyage, and by the Post-Office Department of England about $5000 a voyage.

In Italy the amount paid on the gross measurement of iron and steel vessels is ten dollars per ton, and an additional premium is paid on steamers of over fourteen knots.

The following list of steamship companies, with the number of their steamers and their tonnage which are subsidized to a greater or less extent by their respective governments, may be of interest, as showing the extraordinary development, in recent years, of European commercial industries. The British India Company, 103 steamers, with an aggregate tonnage of 240,000; Peninsular and Oriental, 36 steamers, 216,000 tons; Messageries Maritimes, 61 steamers, 202,000 tons; North German Lloyd's, 66 steamers, 197,000 tons; Navigationze Generale, 106 steamers, 170,000 tons; Compagnie Generale Transatlantique, 66 steamers, 167,000 tons. Hamburg-America, 86 steamers, 165,000 tons; Wilson Line, 86 steamers, 158,000 tons; Austrian Lloyd's, 73 steamers, 128,000 tons; White Star Line, 20 steamers, 96,000 tons; Cunard Line, 26 steamers, 86,000 tons.

With such an enormous development of European shipping under the subsidy policy, it is not strange that we, in the United States, should have been left far behind in the race for the commercial supremacy of the world, but it becomes us to consider whether it would not be well for us, under the circumstances, to adopt the same policy. The advantages possessed by England, in this regard, may be illustrated by the fact that in the year 1892, Chinese imports amounted to $123,500,000, and her exports to $102,000,000, and of these imports Great Britain furnished $110,000,000 and took $60,000,000 of the exports, leaving a balance in her favor of $50,000,000. Of these imports the United States furnished but $6,000,000, and we took $10,000,000 of the exports, leaving a balance against us of $4,000,000. It is true that the twenty-three treaty ports of China have been but recently opened up to us, but if our exports to other countries are carried in foreign ships, our trade with China and the teeming millions of the Far East must be carried on in the same manner, unless a different

policy is inaugurated with respect to our ship-building industry. Yet we are peculiarly well situated to become carriers for China, Japan, and the East Indies, which contain nearly or quite one-half of the entire population of the globe, by reason of the fact that our harbors on the Pacific Coast, and more particularly on Puget Sound, are among the very best in the world, and that in their immediate vicinity are forests unsurpassed in quality and quantity of timber for ship-building purposes with convenient deposits of coal, iron, and other minerals equally necessary and valuable.

The opening up of new ports for our commerce is not a matter of much importance, unless the commerce which may thus be secured is carried in our own ships. As an illustration of the value of the China trade, which is rapidly growing into large proportions, it may be mentioned that in the year 1893, the total tonnage of vessels entering and clearing at the port of Hong-Kong amounted to 14,349,122 tons, being an increase over that of 1892 of 196,273 tons. In that year there were in that port alone 32,983 arrivals, with a tonnage of 7,177,025 tons, and 32,858 departures of 7,172,097 tons. This is entirely exclusive of the foreign and local junk trade, and was almost, if not quite, all in vessels of European construction. As the commerce of China is largely under English control, it may be readily concluded that it is carried, in proportion to that control, in ships of English ownership and construction.

WILLIAM F. PROSSER.

(To be continued.)

THE GREAT STRIKE OF 1894.

A "STRIKE" is generally the result of a contest between capital and labor, and may be either peaceful in its operations or belligerent. In the former case its objective is more apt to be attained; in the latter, to be defeated. Capitalists form corporations and combinations for their mutual profit and protection, hence monopolies and trusts. The masses, composed of laborers and mechanics, are accordingly compelled to form labor associations and trades-unions for mutual guidance and protection. A disagreement in the interests of the latter, with employers, eventuates in a strike, with the object of forcing the latter to agree to the terms of the employés or to arbitration.

The strike is a device of labor, not of capital in whose interests the majority of legislation appears to be framed. The right to strike or to quit work is incontestable, for employés have an inherent inalienable right to work or stop working, but they transcend that right when they influence or forcibly deter others from working. Neither has a striker the right to place a value upon another's labor, nor dictate what a man shall or shall not work for. In proceeding to these extremes strikers have not the shadow of right or law to countenance them, and in this respect strikes are said to be illegal. Leaders of strikes have a due appreciation of the potency of public opinion as a factor in their plan of campaign, and hence, in their platitudes and bulletins to their unions and the public, they advocate peaceable measures and deprecate violence of any description. However, their motto, "win, peaceably if you can, violently if you must," is an essential principle of their plan of operations. This was demonstrated by the telegrams sent by Eugene V. Debs, president of the American Railway Union, to the public press and to branches of his union; the one was for peaceful measures; the other, "save your money and buy guns." The wonder is that his two millions of dupes obeyed his order with blind obedience, trusted him implicitly, forgetting they owed allegiance to another president,—the President of the United States, whose every act they criticised and condemned. In this they were encouraged by the governors of States and mayors of cities. For a time—a short time it is true—the demented Debs fancied he was a bigger man than Uncle Sam, since the latter merely represented fifteen

thousand effectives in the standing army. The militia, consisting of one hundred and twenty thousand, being of the people and strikers, cannot be depended upon in State convulsions.

The contest between capital and labor is not a new one,—it is coeval with the human race, with society in all its shapes and in all ages. In early times it manifested itself in master and slave, the latter being a chattel that could be bought, sold, and killed, and thus it has come down to our century with few modifications other than those developed by a better system of education among the masses,—a right in former ages appropriated solely by the lords and masters.

Rome had its plebeians and patricians, among whom the very question that is agitating the civilized world at this very hour was fought over and over, and nearly sapped away its life blood. In the Middle Ages—the dark ages—the contest or the disease manifested itself in the form of feudalism, and the serfs, or vassals, were little better than cattle. The latter had no rights either in body or soul, not even the right of sleeping with their wives on the first night after marriage. The lord enjoyed that privilege.

In the sixteenth century a wave of intelligence swept over Europe, a tide of reformation set in, which has steadily progressed in its beneficent effects, and with it the betterment of the condition of the wage-earner. As a result, England freed her slaves by purchase, America also hers, ostensibly as a war measure, but in reality at the point of the bayonet. We do not enjoy a monopoly of this species of civil convulsions; our cousins, the English, from whom we received our first lessons in trades-unions, labor organizations, and strikes, cannot cry out with holy horror, "What a barbarous people; republics are a failure," and other such twaddle. Hyde Park is noted for its turbulent mobs,—strikes. During the reign of George III. the Gordon riots occurred in London, when thousands of the proletariats were shot down by the military. We have not come to that yet, for our masses are less vicious and have more respect for law and order, although there is no telling how long this condition will last, since the crying evil of the hour—unrestricted immigration—is leavening our American laborers with the principles of Socialism and anarchy, imported by the lowest and most vicious types of humanity.

Even since the accession of Queen Victoria the Duke of Wellington was compelled to lead an overwhelming military force to prevent the Chartists from marching on Westminster while Parliament was in session. In the orderly and military city of Berlin, under the linden and the very eyes of the emperor, the Prussian mobs have resorted to acts of violence and blood, and many have been shot down by the police or by the Corps de Guarde, if the former were not able to contend with the rioters, and recently Belgium experienced very serious riots in Brussels in reference to the franchise.

The barbarities of the French Revolution were a direct result of the contest between capital and labor, in which the guillotine functioned energetically. There the masses shrieked for equality and fraternity, "à bas les Bourgeoisie; vive l'anarchie," and human blood flowed freely through the streets of le beau Paris, turned by the demons into a veritable hell.

In 1871, after Paris suffered the dangers and hardships of a four months' siege by the Germans, when horse-flesh was so rare and costly that it could be purchased only by the wealthy, it was forced to undergo another siege of two months, with infinitely more atrocious consequences. The Communist army, re-enforced mainly by the national guard of Paris, who deserted the tricolor, on the surrender of the city to the Germans, for the red flag of anarchy, is a terrible example of possibilities.

Our National Guard did not certainly fight against the government in our recent strike, but they preserved a masterly inactivity; they were neutral; they did not fight at all. It is too much to ask of human nature to shoot down one's brothers, cousins, and aunts,—in fact, the National Guard of a State ought not to be so severely tried. For national defense they will do, but in State convulsions, except when anarchy is rampant, they are not to be depended on.

The attempt to establish the Commune, or the gospel of equality in temporalities, was but a strike of the bloodiest and most gigantic dimensions. General MacMahon, with the remnant of the regular army and the Loyal Guard Mobile, succeeded after two months of slaughter, inside and outside of the walls, in forcing the Communist army behind the barricades, where they showed more bravery, desperation, and determination than they exhibited in the four months' previous siege by the Germans. All the principal streets were systematically and scientifically barricaded, and thousands fell in their capture and defense. Women were seen by the side of their husbands and brothers, behind the barricades, fighting for the Communist cause; others, with milk-cans filled with petroleum, were busy in setting fire to the principal buildings of Paris; and the backbone of the Commune was broken and peace restored only by the severest measures, in which fifty thousand of the mob were shot and thirty-six thousand deported to Cayenne.

History repeats itself with varying modifications, and like causes will produce like effects. We have not yet arrived at this phase of the contest between capital and labor, but are we not approaching it gradually? The great strike of 1894 is but a symptom of a disease, —a sign of the times; not a mere incident in our history, but one indicative of a condition that confronts us.

The fight between capital and labor is becoming more bitter and intense day by day, trades-unions are becoming stronger and better organized and prepared for conflict, excited and frenzied by imported

Socialists and anarchists. These unions are organized into companies, regiments, and brigades; are carefully and persistently drilled in the use of arms, and, unlike the government, its leaders utilize the principle "in peace prepare for war." What is the government doing to meet this possible emergency? Nothing, notwithstanding the evident lessons so glaringly inculcated by our recent great strike.

Master-Workman Sovereign and other prominent leaders of labor organizations bitterly criticised the recent recommendation of General Schofield to increase the regular army by the paltry number of five thousand, and our legislators in Congress are silent on the matter, fearing to be left at home, where they would do the most good, if they had the courage of their convictions and would legislate for the obvious necessity of the times,—an increase in the army, as a measure of strengthening the executive branch of the government.

The success in subduing the strike of 1894 was very much in the nature of a bluff, for the soldiers of the regular army who were called out to suppress it were necessarily few in comparison to the armed strikers, and counted largely on their prestige as representatives of the government. The next time the bluff may not succeed, for the hand may be called, and we cannot count much longer on prestige, for organized unions are beginning to realize their own power and the weakness of the executive branch of the government. The mob respects nothing but force; it cares not for the United States uniform, nor for the government against which it is in armed revolt. It is power it is afraid of; it is numbers it respects; weakness on the part of the government only invites attack and encourages revolution. It is a well authenticated fact that the mob intended to oppose with arms the United States forces at Sacramento, and would have done so had the force been less; it was not respect for the uniform that deterred it. A company of regulars can no longer march through the streets and awe the mob; that is a thing of the past.

I have no patience with officers who assert that a corporal's guard of regulars is enough to cow a thousand strikers. The novelty and, indeed, imminent danger to the republic has been presented, last summer, of Coxey's and other industrial armies marching on Washington while Congress was in session. Fifty thousand men from all parts of the country were to concentrate simultaneously in Washington, and present the demands of labor to the legislators of the nation,—fifty thousand, composed mostly of tramps, strikers, and desperate men. The plan miscarried through want of unity of command, defective mobilization, and insufficient transportation; and only a rabble, called Coxey's army, succeeded in invading the national capital. Suppose the plan had succeeded, and fifty thousand well-armed and organized strikers had taken possession of Washington, what would have beeen the probable result? The government would have been simply paralyzed for the time

being. Last summer nothing was done to stop the onward march of these armies on Washington, although great danger was apprehended. Congressmen then in session, who were elected by the votes of these very men, would not lift a hand to stop them. The government would have been obliged to assemble its scattered peace effective of fifteen thousand men of all arms, from all quarters of this immese country of magnificent distances, and before its parts could be concentrated in and around the capital—probably some of them would never reach there, for the strikers would have partisans in their rear to destroy railroad tracks, who would prevent the concentration of the army, or at least hamper and delay it indefinitely—Congress would be expelled from the capital, the public buildings in possession of the mob, and anarchy established in Washington. What could our fifteen thousand regulars do, in the event of their arriving at the seat of war? They could do much, but I fear not enough to roll back the tide of revolution, for they are but human, after all, and few in number for the extended, arduous, and complicated duty that would be required of them.

Let us suppose there were one hundred thousand such strikers armed with the K. J. rifle, or at least regiments of them, what would the government be forced to do? Call out volunteers. Where would they come from? Certainly not from capitalists and moneyed men of the community to any great extent; from the laboring masses? but they are the very ones that are striking and in open revolt against the government; therefore, the new army would not be recruited from their ranks. Thus the government is defied and powerless, and revolution reigns supreme,—its trail marked by blood, rapine, and famine.

The last strike teaches that the above picture is possible in reality if not probable, and yet men are blind to the necessities of the hour, and cry, "No increase in the army;" "we can have an army any time we want it;" "we will never need more than twenty-five thousand;" and much of the public press reiterates these absurd fallacies. Last year, if the plans of the leaders of the strike and of the armies marching on Washington had succeeded in their initiatory operations, a general revolution would have followed.

The republic should be prepared for the next attempt at revolution, which will be much more extended, formidable, and better organized. The remedy and only solution to the dangerous problem that stares us in the face is a standing army of 100,000 men, or, at the very lowest figure, 50,000. The latter would be a small army for a brave and intelligent nation of 70,000,000. The danger to the country is not its standing army, but its total lack of an efficient one. Where can the danger be to 70,000,000 in an army of 50,000? If there is any, it speaks poorly for the 70,000,000. This increase of 25,000 would require no new organization and entail comparatively little expense. All

that is required would be the completion of our skeleton organization, rendering it a solid, tactical, and homogeneous body. Thus, give the twenty-five infantry regiments twelve companies of a hundred men each,—the three battalion formation,—the artillery increased by two or three regiments of twelve batteries each, with a full complement of men, and the cavalry ten regiments of twelve troops of one hundred men each. This increase would be a step in the right direction, a result of economical and enlightened statesmanship, and should be adopted at once, before it is too late; for when we do want an efficient armed force, we shall want it badly and instantly. But I fear the words of Sir Charles Napier are pertinent in this connection,—"In the beginning of each great war England has to seek in blood the knowledge necessary to insure success; and like the devil's progress towards Eden, her conquering course is through chaos, followed by death."

IMMEDIATE CAUSE OF THE GREAT STRIKE.

The great Pullman and railroad strike originated in a demand for an increase of wages by mechanics employed in the car-manufacturing shops of the Pullman Palace Car Company, Illinois. The demand was refused, and two thousand men laid down their tools on the 11th of May. An attempt at arbitration was made a few days afterwards, but failed. Matters stood thus until June 15, when a committee of strikers again sought the officers of the Pullman Company with a proposition to arbitrate the dispute. They were met with the reply that there was nothing to arbitrate. Before the strike began the labor organization, known as the American Railway Union, had assured the Pullman men that, in the event of a strike, the union would support them by declaring a boycott against Pullman cars,—that is, that the members of the union, employés of the road, would refuse to handle trains made up in whole or in part of Pullman cars. On June 26 the boycott was declared and the general strike began. The boycott operated on all trunk lines in the United States with the exception of the Vanderbilt system, on which Wagner cars are used. The roads affected were the Illinois Central, the Northern and Southern Pacific, the Santa Fé, the Chicago and Northwestern, and the Wisconsin Central, and their various ramifications. The foci of the storm were in Chicago in the East and Sacramento in the West. In Chicago the disturbance was the greatest, for it contains a large element of foreign anarchists, who utilized the opportunity for plunder and conflagrations, for which the strikers had to bear the odium and responsibility. This course did not characterize the movement in Sacramento, where the strikers had no complaint against the Southern Pacific Railroad, and were actuated merely by sympathy for the Pullman strikers. The National Guard in the different States affected were called out to check and end the strike, but signally failed, and especially so in Sacra-

mento on the 4th of July, where they were in full sympathy with the strikers. On the 1st of July, Attorney-General Olney received dispatches from Judge Hallett of the United States Court of Colorado, and the United States marshal, that the railroad strikers refused to allow trains to run from Trinidad, Colorado, on the Atchison, Topeka and Santa Fé and the Gulf, and asked that United States troops be sent to move the United States mail. Mr. Olney immediately carried the dispatch to the White House, where a conference, consisting of the President, Secretary of War, the Attorney-General, and General Schofield, immediately assembled. The result of this conference was the dispatch of orders to Generals Miles, Brooke, McCook, Otis, and Ruger, to use the force at their disposal in moving the United States mail, and re-establishing the provisions of the Interstate Commerce Law. The orders were promptly obeyed, and the army was immediately ordered on field service, on a war footing.

The proclamation of the President of the United States about this time, characterizing the strike as revolutionary and warning loyal citizens against acts of violence and disorder, was a powerful element in the restoration of order. The strike in Chicago was marked by the utmost violence, rendered so by the acts of desperadoes and foreign anarchists, with a sprinkling of native recruits; but the appearance of General Miles and his twelve hundred regulars early in the conflict had at once a most depressing effect on the enthusiasm of the mob, and very soon reduced it to a state of submission.

The force of the strike was thus broken in the head centre of its operations, but continued to increase in violence in Sacramento, the storm centre of the West. The following is a *résumé* of operations in Chicago from the 4th to the 20th of July, during which time the troops were in the field by the direct order of President Cleveland. Those from Fort Sheridan arrived in Chicago at midnight on the 3d of July, and consisted of eight companies, Fifteenth Infantry, Troops B and K, Seventh Cavalry, and Light Battery E, First Artillery, under the command of Colonel Crofton. Two companies of infantry were sent to the stock-yards, where they arrived early in the morning of the 4th. At 10 A.M. the two troops of cavalry and light battery marched through the city to the Rock Island Station, and by 1 P.M. were loaded on a train and started for the stock-yards. The way lay through the disaffected district, and after a most difficult and trying ordeal through streets lined with strikers, hoodlums, and criminals, arrived at the stock-yards at 3 P.M., and unloaded with great delay and danger at about 6.15 P.M., having been surrounded by a howling mob numbering thousands. Colonel Ovenshine held command here. The troops were bivouacked in Dexter Park. Next day, July 5, at 9 A.M., a mob of about six thousand gathered around the cattle-cars, which were guarded by the troops on each side of the track while being loaded. Captain

Hare's troop drove back the mob from in front of the engine. The train was to move at noon, at which time serious trouble was apprehended from the excited mob. However, no shots were fired, and the train moved amid frantic shrieks of the vilest epithets known to the gutter-snipes of a locality of which hades is said to be a pocket edition. Soon the train was brought to a halt, the track being found obstructed by a broken switch; this was soon remedied by a railroad employé, who was knocked down by a boulder thrown by somebody in the crowd, and finally the cars were overturned some distance in advance of the troops. Here a wrecking train had to be brought into requisition. This wrecking and obstructing trains was a part of the plan of campaign of the strikers, and was put into execution also on the Lake Shore Road, east of Thirty-eighth, Thirty-ninth, and Fortieth Streets. Captains Conrad and Cornish, with their respective companies of the Fifteenth Infantry, soon put a stop to the vandalism in this quarter. The attempt to move the train from the stock-yards was a failure, and the mob was correspondingly elated. In these instances the troops showed the greatest forbearance, which, falsely interpreted by the mob, meant that they would not shoot at them.

On the morning of July 6, Captain Sanno, from Leavenworth, with five companies of the Seventh Infantry, and Leefe, from Fort Brady, with two companies of the Nineteenth Infantry, arrived at the scene of disorder. The promptitude with which these troops answered to orders and the necessity of the moment is worthy of commendation and indicative of the high state of efficiency of these regiments.

At the stock-yards the mob was continuing its efforts, with more or less success, in stopping meat-wagons from leaving the yards. At Fifty-first Street a train had been held up for a short time by the mob, but was finally released by Captain Conrad, and the mob dispersed, to re-enact the same diabolical tactics somewhere else. During the night, four miles southwest of the stock-yards, hundreds of cars and the World's Fair buildings were set on fire by the strikers, and the city was treated to a grand illumination.

About this time the respectable people of Chicago were heartily wishing for a larger standing army, for they felt the gallant few then in the city had a colossal work to face. Trouble was apprehended at Dearborn Street Station, and Captain Hartz, in command of Company D, Fifteenth Infantry, was dispatched there with orders to patrol the track and keep the road open. He was not long there when the mob attempted to derail a train on which seven of his men were stationed as guards, who fired on the mob, killing one or two and wounding several. The train was not overturned, and this blood-letting had a very salutary effect in restoring to reason the anarchist element of this locality. While this was going on in Illinois, the strikers of Indiana began extensive operations in Hammond, but their activity was nipped

in the bud by the cleverly planned and executed tactical dispositions of Captain Brown, Twelfth Infantry, who, on being relieved by the Hoosier State Guard, returned to Chicago. In the mean time the regular troops were being rapidly concentrated in Chicago. Colonel Bartlett, that battle-scarred veteran of many fields, arrived at the head of eight companies of his regiment on the afternoon of the 9th, and Colonel Gordon with four troops of the Sixth Cavalry on the morning of the following day. That afternoon three light batteries and four troops of the Fourth Cavalry, under command of Major Randolph, Third Artillery, from Fort Riley, reported for duty. The arrival of this addition of cavalry and light artillery was warmly welcomed by their companions in arms, and as heartily hissed by the gutter element. The presence of these fine troops had anything but a soothing effect on the rabble, who could not help respecting, no matter how much they feared and hated them.

The troops, necessarily divided into detachments in different parts of the city and under different commanders, performing so many complicated duties, were united by an admirable system of telegraphic communications with head-quarters, and, in case these should be cut by the strikers, a system of signals was established by Captain Allen, chief signal-officer, fully prepared to keep the general commanding advised of the movements of the mob and troops. A system of patrols was also established to protect public property and keep open the railway lines. The companies of the different commands were stationed as follows, and were generally fed by the railroad officials as a matter of emergency, to facilitate the service of the troops, the companies being of necessity broken up into ten or twelve squads and without the conveniences of cooking. This subsistence the troops received and accepted, not as a favor to themselves, but as a convenience to the road, whose officials were only too willing and glad to offer the accommodation to the troops in consideration of the great service they were incidentally conferring on their companies: The Ninth was camped on Lake Front; Sixth Cavalry, Camp Brighton; Captain Randall, Fifth Infantry, at Illinois Central Station, patrolled the track to Harvey, twenty-two miles south; Major Baily, Fifteenth Infantry, commanded two companies of his regiment at Dearborn Street Station. The Grand Central Station was commanded by Captain Stretch, Company F, Tenth Infantry, and Captain Leefe, Company B, Nineteenth, Northwestern Station; Captains McGunnigle and Cornish, Government Building, guarding same. Lieutenant Seyburn, Company H, Tenth Infantry, had charge of a patrol train running a few miles out of the city and back, with the object of guarding the Atchison, Topeka and Santa Fé Railroad track. Union Station was occupied by Companies A and E, Fifteenth Infantry, commanded by Captains Humphreys and Brinkerhoff, who were held in readiness to keep open the roads entering there. General Miles, aided by an efficient staff, held these various

detachments in hand with as much solicitude as though they were so many army corps, and by his able and resolute management Chicago was saved from conflagration, pillage, and destruction.

The discipline of the troops in this trying episode was highly gratifying, and received marked acknowledgment from the whole community, save those who were in sympathy with anarchy, arson, and pillage. In one respect the army reaped a great advantage, for it was brought into public notice, and the people became familiar with the fact that there was a standing army in the country, which, though small in numbers, was thoroughly reliable and efficient, and accordingly respected and appreciated by reputable men.

The troops were withdrawn on the 20th of July, and the strike in Chicago was completely crushed. Let us now advert to operations in Sacramento.

The following was the status in California: A. N. Towne, first vice-president of the Southern Pacific Company, on being asked by the executive council of the American Railway Union to arbitrate the differences between the strikers and corporation, and requested by the governor of the State to accede to the proposition, telegraphed to Governor Markham, "We are not a party to the controversy underlying this issue, and are not, therefore, in a position to appear in any arbitration of the difficulty. Whether or not the laws of the State and of the United States shall be enforced is a question which the Southern Pacific has no power to submit to arbitration." On the other hand, H. A. Knox, the head of the American Railway Union in Sacramento, announced the ultimatum of the union. He said the strike would not be raised until the Pullman Company consents to a return of the wages paid in 1893, or, failing which, the Southern Pacific system should abrogate its contract with the Pullman Company and, if need be, purchase the interest of the Pullman Company in the sleeping-cars; and, in addition, that the Southern Pacific Company should restore all trainmen and shopmen to the positions occupied by them before the strike. On the 2d of July Superintendent Fillmore announced that a mail-train would leave Sacramento on the afternoon of the 3d, and Chairman Knox positively stated that no train would go out, and United States Marshal Baldwin declared that if the United States mail was put on the train he would see that it would not be detained. Virtually this was a declaration of war between both parties, for if an attempt had been made to get out a train and break the complicated blockade, the strikers would surely oppose it, as it would mean a death-blow to the strike. The strikers were thoroughly organized, their discipline and strategy worthy of trained diplomatists. Overtly no violence nor destruction of life or property was countenanced by the leaders, and where such incidents occurred they were denounced by Knox, the vice-president of the American Railway Union, as the work of alien anar-

chists. Later events proved this apparent respect for law and order to have been merely a matter of temporary policy to insure the good will of the community. On July 3 the National Guard of the State was called out to afford assistance in forcing the transportation of the United States mails, Attorney-General Olney having officially decided that a mail-train consisted of the usual through train, made up of baggage- and mail-cars, passenger-coaches, and Pullman sleepers. The greater part of the guard was ordered to Sacramento, where about five thousand strikers, armed with guns and pistols, had seized the depot, shops, etc., of the Southern Pacific Company.

Although on June 30 the State troops had been notified to hold themselves ready for action, nothing was done in the way of preparation for field service. They were not provided with blankets, overcoats, haversacks, nor camp equipage; in other words, the citizen soldiery are provided the wherewithal for picturesque effect on parade, but are supplied with none of the practical necessaries of warfare. It would have been an easy matter for the general officers in command to have obtained supplies of hard tack, canned goods, and coffee, to have them distributed to the men on the train, as they had no provision either for cooking or carrying their food; but this was neglected; as a consequence, when these regiments, composed largely of young men used to a sedentary life, found themselves, after a sleepless, supperless night, deposited in the tropical heat of Sacramento, and, after a meagre and hurried breakfast, were commanded to seize the railway depot and dispossess five thousand men, they literally "felt weak." One brigadier-general asked the mob if they would have any objection to his command being taken to the depot, out of the burning sun. The mob had serious objections, so the general withdrew. After two or three hours argument between United States Marshal Baldwin and the strikers, during which the extraordinary spectacle was offered of the rioters bringing buckets of ice-water and baskets of sandwiches and otherwise administering to the exhausted militia, the order was finally given to charge the mob with the bayonet and clear the depot. One colonel responded to this order, that his men were completely prostrated and "their condition was such as would not render it safe to adopt offensive measures at that time," and as the soldiers were rapidly retiring on their own account and even handing over their arms and ammunition, in acknowledgment of the strikers' hospitable kindness, an armistice was declared. The mob remained in possession and the National Guard of California went into camp near by,—to the satisfaction of all immediately concerned. Yet in justice to the guard it must be said that, afterwards, when their wants were supplied and their commanders had learned the difference between a street parade and a conflict with an armed mob, they did good and efficient service. Meanwhile, the animosity against the Southern Pacific Railroad became

more bitter daily; alarming news came of armed companies from the various towns of the State, *en route* to re-enforce the strikers at Sacramento. During this time the rancor of the populace was blindly turned against the regular army, shaped by the press of the State, who declared that the army was in sympathy with the railroad. The passing days, with their developments, brought the conviction that Federal troops alone could suppress the disturbances throughout the State, which almost amounted to open insurrection. On the 9th of July, a cipher telegram was received at my post, Benicia Barracks, California, but the contents remained a secret with the commanding officer. Not a man had been permitted to leave the limits of the post for a week past, and the suspense and confinement were beginning to tell upon the *morale* of the troops. Next day, amid alarming rumors of murder and riot at Sacramento, came the expected order of Company E, First Infantry, to join the regular troops on board the steamer "Alameda," *en route* from the San Francisco harbor posts to Sacramento, which would arrive at Benicia at 6 P.M. The command on the steamer consisted of Batteries A, E, H, K, and L, Fifth Artillery, commanded respectively by Captains Thorp, Vogdes, Coffin, Riley, and Roberts; field officers, Colonel Graham and Lieutenant-Colonel Guenther; two troops of Fourth Cavalry, Captains Lockett and Binson, Colonel Young in command; three companies of United States Marine Corps, Captain Berryman and Lieutenants Perkins and Draper, Major Pope in command, and, including Company E, First Infantry, amounted to five hundred and forty men. Had the United States the needed number of men in its army and the infantry arm of the service a proper tactical organization, the artillery and marines would have remained at the Presidio and Mare Island to attend to their legitimate duties, and the five hundred and forty men would have been infantry and cavalry as they ought to have been. Yet there was but one infantry company in the whole command, which palpably proves the necessity of a larger infantry force at the command of the government. In the emergency of the hour every available man of the army and navy had to be called out, and it is well they were, as the sequel proved.

The governor of the State believed the greater danger was in San Francisco, and had the populace arisen there while the available regular force was in Sacramento and Los Angeles, there would only be the two light batteries of the Fifth Artillery left at the Presidio to face the mob.

The First Infantry, in command of Colonel Shafter, always true to its motto,—*semper primus et paratus*,—was ordered to Los Angeles early in the struggle, where it made itself instantly felt. Here the intimidation exerted by the strikers over those disposed to work, and the disregard shown to the mandates of the United States courts, rendered resumption of the operation of the railways at that point for the trans-

mission of the mails and for the purposes of interstate commerce practically impossible, except by the interposition of military force.

The result of the presence of the troops was that the mail-train service was soon resumed on all main lines,—first to the east and later on to San Francisco. The trains were guarded by detachments of troops from the 7th until the 15th of July, when they were discontinued. With the exception of the overturning by strikers, on July 10, of some cars on a railroad crossing to interrupt the running of trains, no overt act was committed during this time, but there is sufficient evidence for belief that the strikers would have resorted, in the absence of a military force, to any degree of violence thought necessary to prevent the operation of the railroads centring at this point, except upon terms dictated by themselves.

On the afternoon of the day of departure from Benicia, General Ruger, department commander, sent a dispatch to Colonel Casey, commander of Benicia Barracks, to be handed to General Graham, the purport of which was that threats had been made by the leaders of the strikers that the troops would be fired upon from the banks of the river as they approached the city, and that the landing of the troops would be opposed with arms. This dispatch was handed by me to Lieutenant Summerall, Fifth Artillery, the efficient quartermaster of the colonel commanding, while on my way to the point of debarkation. My company was provided with fifty rounds of ammunition in their field belts, forty in their haversacks, and a reserve of one hundred and ten per man carried along in original packages. We arrived about 7 A.M. at a point about two miles from Sacramento without anything of a serious nature having occurred during the night. We expected an attack upon landing, and the infantry company received orders during the night to land first and deploy as skirmishers, to prepare for the landing of the rest of the command. Happily no opposition was encountered, there being but few spectators present. The troops were promptly landed, formed into line, and about 10 A.M. advanced to the Sacramento depot, the focus of the disturbance, in two battalions, Colonel Guenther in command of that of the artillery which composed the first, and Major Pope, of the marine corps, the second battalion, consisting of marines, to which the infantry company was attached. Two Gatling guns moved between the battalions, and the two troops of Fourth Cavalry, in command of Colonel Young, brought up the rear. We expected hot work at the depot, and every man was eager for the conflict. As we marched through the streets, crowds were massed all along, whose aspect was anything but friendly. They looked upon us as an invading army and scowled accordingly. The troops bore themselves proudly, presented a fine martial appearance, and must have been admired by the populace, notwithstanding their angry and excited feelings. We arrived at the depot about 11.30 A.M. and found not a single striker in posses-

sion, much to our surprise. During the rest of the day the troops were busy in taking possession of the shops, cars, and property of the Southern Pacific Company and forming an extensive line of pickets around the depot. This duty was promptly and efficiently done by the two troops of the Fourth Cavalry; the artillery, marines, and infantry company forming line in front of the depot, awaiting and prepared for any move on the part of the mob, which showed symptoms of aggression. The crowd pressed towards the depot to hem in the troops and circumscribe their sphere of action, but they were foiled in the attempt, as the troops pressed the mob back until about one hundred yards intervened between the depot and the outer cordon of sentinels. In this action a little cold steel was wonderfully efficacious in taming the ardor of the sovereign people. At noon, on the 11th, a train consisting of engine, tender, four mail-cars, one baggage-car, two day coaches, three Pullman sleepers, and a dining-car, with a guard of twenty-five men under Lieutenant Skerett, Fifth Artillery, stood in the depot ready to start for San Francisco. It pulled out at 12.10 P.M., amid the howls, jeers, and insulting epithets of the strikers, and twenty minutes after it was ditched, about two miles out, as it reached the second trestle from American bridge, and engineer Clarke, who had volunteered for the service, and three soldiers were killed, and another mortally wounded. The spikes and fish-plates which held the rails in place on the trestle had been drawn, and in consequence the rails spread, making the ditching of the engine inevitable. There is no doubt that this murderous act was perpetrated by a band of strikers who left Sacramento before the train started, the leader of which, Worden, now lies under sentence of death in the county jail. Doctors Pope and Willcox were dispatched to the scene of disaster, and a troop of cavalry under Colonel Young was sent at a gallop. The cavalry, I may here add, was handled skillfully while in Sacramento, was indefatigable night and day, and rendered excellent service, which could not be as well done by any other branch of the line. They captured three of the strikers in the immediate vicinity of the wreck, secreted in the brush, who were armed with revolvers and dynamite cartridges. On the morning of the 13th, while an effort was made to move a naphta-car from the vicinity of the boat-landing, the train hands and guards were assaulted by men in a crowd near the tracks, shots being fired and missiles thrown at them. Captain Roberts was instantly ordered with his men in double time to the scene of disorder. United States Marshal Baldwin also arrived there and ordered the mob to disperse, but he was greeted with insults, and then Captain Roberts cleared the ground at the point of the bayonet, during which two strikers were mortally wounded. About 10 A.M. of the same day a train eastward bound, made up in two sections, was ready to start The infantry company was selected to guard this train. The captain of the company, in whose hands were the lives of fifty good men, took

the necessary precautions before starting that another catastrophe should not take place, and insisted on having a sufficient number of platform- and box-cars placed before the engine. Every bridge and trestle was examined before being passed over, and the train arrived at Rocklin about 1 P.M., where it awaited the arrival of the second section, in which were Colonel Guenther and Batteries E and H, Fifth Artillery. While waiting for the arrival of the second section, the infantry company took possession of the large amount of railroad property stationed there and of the little town, which soon thought a cyclone had struck it; it took only a few hours to reduce it from a state of offense to respectful submission to authority and the laws. The second section arrived about 5 P.M., and both sections pulled out next morning, the infantry company leading, leaving the greatly surprised town in the peaceful possession of Captain Berryman, in command of a company of marines who arrived the same day. The infantry company was dropped off at Cisco on the 14th, and the rest of the command proceeded to Truckee, a hot-bed of the disaffected. Here armed resistance to the troops was expected, but, as in Sacramento, did not culminate, save in sneers and insults. The mob did not like the looks of the Gatling gun, in charge of Lieutenant Sage, and thought better to keep hands off. The infantry company on the 17th was ordered to Colfax, a central position between Sacramento and Truckee, and the troops in the latter village were kept in touch with Colonel Poland's force of the Sixteenth Infantry at Reno. General Brooke, commanding the Department of the Platte, ordered the troops of Forts Reno, Sill, and Supply into the field of action, protecting United States mail, guarding railroad bridges, and supporting United States marshals in making arrests. In this way the Southern Pacific and Central Pacific roads were guarded from Sacramento to Reno and westward to Ogden.

While these movements were being executed the strikers were very active at the Oakland Mole. All the available men in command of General Ruger were at Sacramento, extending as far as Truckee, and at Los Angeles, so the navy had to be called on at Mare Island to counteract the violence of the mob at Oakland. Captain Howison, commanding the yard, responded to General Ruger's urgent request for assistance, he having previously received instructions to do so on application, by dispatching Lieutenant Commander Reeder, thirty officers, and three hundred and forty blue-jackets, taken from the ships at Mare Island, to Oakland. This force was armed and organized as infantry with a gun detachment and two Gatling guns. At Oakland the strikers were very aggressive, but the presence of the blue-jackets had from the start a sobering effect.

This command, thoroughly efficient for any duty that occasion might require, was placed at the terminus of the railroad in Oakland, commonly designated as the Oakland Mole, and was charged immedi-

ately with giving such protection as might be necessary to prevent interference with track and trains at the Mole, and also, in case of necessity, to go to the assistance of the State troops in Oakland, to quell riots against the operation of the railroads in Oakland, in the vicinity of the Mole. The presence at hand of this naval force was very beneficial in repressive effect upon the disorderly element in Oakland, and, upon occasion arising, was available for duty in San Francisco. The naval force was in part relieved on July 24, and the remainder on July 27, last, and returned to the navy-yard.

The naval brigade having been relieved, the Second Regiment of the National Guard, commanded by Colonel Geary, an ex-sergeant of the regular army, superseded it in keeping order, and did excellent service at Oakland. On an occasion when the regiment was moving rapidly to avert a threatened danger on the part of the mob, it was confronted and brought to a halt by a virago, who with unlimited billingsgate began to denounce the soldiery. A little cold steel sternly applied cleared the way of obstructions and the regiment proceeded to its objective. The backbone of the strike was broken by the end of July, and it took every available man in the army, navy, and marine corps in the vicinity of San Francisco to accomplish the fact.

The marines presented an exceptionally fine military appearance, and would make excellent infantry after a few more weeks of campaigning.

Colonel Shafter and the officers and soldiers of his command deserve great credit for the prompt, energetic, and judicious manner by which the turbulent masses were brought to their senses in Los Angeles and other places in Southern California.

At Sacramento the phase of the trouble upon arrival of the troops had far passed the limits implied by the word "strike." It bordered on that of revolution, and the services rendered by Colonel Graham and the officers and soldiers of his command were most important and performed with corresponding efficiency.

The presence of the naval and marine forces, in conjunction with the effective force under General Ruger, had a stimulating effect, if indeed such were needed, on the artillery, cavalry, and infantry of the command, and the co-operation of these forces was essential to the successful result attained by the arms of the Federal authority. The troops, having quickly and effectively accomplished the arduous duties assigned them, were withdrawn by the 1st of September and the road turned over to the officials.

The troops, while displaying praiseworthy forbearance towards the anarchists with whom they were brought face to face, exhibited such determination in the performance of duty as to quickly dishearten their opponents and break up the strike. They submitted to great discomforts without complaint, and when left to their own responsi-

bility, as on picket at distant points along the railroad line, have, without exception, been found on the alert in the performance of duty. To their vigilance in the dead hour of night may be attributed the escape from derailment of many trains loaded with women and children.

The precedent established by President Cleveland that the regular army of the United States may be used to protect interstate commerce, prevent the stopping of United States mails, and enforce the orders of the United States courts against mobs of any kind gives additional importance to the regular army. The scope of its usefulness has suddenly been widened from Indian fighting to guarding the internal commerce of the country. Such a change in occupation will effect some radical transformations in army practice. For one thing, the size of the army will have to be increased. With a nominal force of only twenty-five thousand men it will be impossible to keep on the frontier a sufficient force to hold the Indians in check and still have men enough to deal promptly and energetically with such an outbreak as the great strike of 1894. Our country is too large and the nerve centres, its great cities, are too numerous to admit of longer depending upon a small body of men dispersed over a remote segment of the country. Before the outbreak a plan for increasing the army had been drawn up in Washington, and it met with very general indorsement among members of Congress. The riots of 1877 in Chicago paved the way for the location of Fort Sheridan on the north shore. An increase in the size of the army will render it possible to station an efficient force of troops adjacent to each of the large cities of the country, where lawlessness is likely to assert itself. Some of the troops came to Chicago from their stations beyond the Missouri River, a locality too remote to allow them to respond with sufficient promptness in times of danger, and the cost of moving troops long distances is very great, even if adequate means to do so are convenient.

The events of the strike have demonstrated the fact that while the local police and National Guard can do much to preserve order, they may be made ineffective by mismanagement or by sympathy with the disturbing element, but with the regular army this is not likely to happen. In many quarters the belief is that our regular army should be considerably increased, and that portions of it should be quartered permanently in the vicinity of each of the large cities of the country.

And now let me add a few words as to the practical lessons to be learned from even a limited experience of the conflict between capital and labor. The sending of delegates from the trades-unions of Europe to the Federated Labor Congress at Chicago is a tiny cloud in the far horizon, but it is a "sign of the times." The world yearly is growing smaller, time and space being annihilated by modern inventions, bringing nations nearer to each other, and no nation can boast "I am secure

from foreign invasion or internal revolution." Only fools can seriously believe that against the trained battalions of nations who make war a practical and scientific study levies of militia or raw volunteers would be anything but food for powder. During the first two years of our civil war, for which we were not prepared,—for the fashion was then in vogue as it is to-day—"we want no army, we can have an army at once, we can whip the world," and the like senseless trash,—we suffered severely in men, money, and national prestige. It took us four years to get up an army after crushing defeats and innumerable blunders in the line of strategy, tactics, logistics, and the subsistence and equipment of troops. Before the Crimean war England cried arrogantly, "I shall call out my volunteer reserve;" WE defy the world because we have a national guard which is not a national guard. The reserve responded promptly, but suffered and died by thousands in the trenches before Sebastopol, as did our own hastily improvised levies in the early part of our late civil struggle for national existence. Ignorance on the part of the men and want of judgment on the part of their officers, many of whom, called from the pursuits of civil life, knew nothing of practical warfare nor of care of men in the field, were the fruitful causes of suffering and death, a much more destructive enemy than the death-dealing weapons of modern times. It is almost impossible to convince the average American Congressman that an army is not and cannot be created in a day, month, or year. The United States sits isolated between two protecting oceans, and says, "Should a foreign enemy approach, I will throw upon my sea-coasts, east and west, my twenty-five thousand regular troops and my thirteen million untrained men of fighting age, and by force of numbers repulse any disciplined army of the world," ignoring completely the fact or the possible fact that disaster lies within its own limits, and apparently not far remote, in the inevitable struggle between capital and labor. China was confirmed in the same delusion; with her four hundred millions to back her, she ignored in her self-conceit the necessity of an efficient standing army, and now she is humiliated in the dust and begging for mercy at the hands of little, despised Japan.

The great lesson to be derived from the strike of 1894, which has been lucidly and strongly set forth by the general of the army, General Howard, and the department commanders, is, the executive branch of the government, if we are to have a government, must be strengthened; in other words, the army should be increased to such a magnitude as to be able to cope with internal revolution and foreign invasion. The national legislature should at once begin and practically carry out the principle: In peace prepare for war. *Si vis pacem para bellum.*

CAPTAIN J. J. O'CONNELL,
First United States Infantry.

THE OLD SOLDIER.

An open square lay midway between a summer-resort hotel and a barrack-faced soldiers' home. Tall trees held their August green against the blue of the sky above the square, and the sun shone in soft yellow patches upon the benches built round the trunks of the shading elms.

There was a path like the bars of an H that crossed the square between the hotel and soldiers' home, but it was worn not so much by the people of the hotel or the soldiers as by the busy feet of the villagers in their short cut to and from the hotel on provender errands and sales of butter and eggs.

Along the path that had been so macadamized by the villagers' feet there hobbled one morning an old soldier. He did not go far; but shuffling on to the first seat under the elm-branches leaned his head on the handle of his crutch and was very still. Madge, skipping down the path as her nurse's fractious pony, drew suddenly upon the reins and stopped, for she had noticed the head-bowed old man.

"He's thinking something sad, I do believe, Lizette," she said, pointing at the old soldier with her tiny finger; "p'rhaps he's lonely. I'll ask him."

"No, no, Mademoiselle Madge," remonstrated Lizette, drawing on the lines; but her fractious pony bolted sidewise and stood before the old soldier. On his left breast hung a shining medal, and in mind he was refighting the splendid battle in which he had won it.

Madge tip-toed nearer, though Lizette jerked the reins to keep her back. Madge paid no attention; she was staring with big eyes at the old man's empty right sleeve pinned to his shoulder and at the wooden prop that took the place of his left leg.

"Poor nice old man!" she exclaimed, sympathetically. "Did it hurt awful much?"

The old soldier slowly raised his head, his mild eyes lighting tardily with the present.

"Did what hurt, little miss?" he asked, gently.

"Why, you know," she answered, pointing to his wooden leg and empty sleeve.

"Oh! to have my arm and leg shot off? No; there are things that hurt worse than that."

She shook her head unconvinced.

Lizette twitched the lines.

"I think," continued Madge, "I think that is so pretty!" and she pointed to his medal.

"Do you?" he said, smiling; "I would not part with that for all the money in the world, little miss."

"It's real lubbly," she responded, with the air of a connoisseur; "but why's it so 'spensive?"

"Would you like to hear a war story, little miss?" he asked; "it goes with it."

"Um, yes, please dear Mr. Old Man," she replied, scrambling onto the bench beside him. "Are there fairies in it?"

He shook his head and his face fell.

"It's best children should not know about war," he said, as if reasoning with himself. "I will not tell it."

"Come Mademoiselle," cried Lizette, twitching the lines very hard.

"Please do tell me the story, *please*," pleaded Madge; "I will be *so* still if you will."

"No," he said; "but I can tell you another story. It is about a little brown-eyed boy your size; he was my son."

"And isn't he now?"

"No."

"Why?"

"Because he's not honest; but he's rich, they say, *very* rich."

"Isn't you very rich?"

"No; but I have my medal. When he grew big he took my money from me by an ugly business trick; but that is neither here nor there. Let me see, I can tell you about him when he was a little boy and had a pony and *was* honest."

So the story began and day after day it lasted, the old soldier on his bench under the elm, little Madge beside him, and Lizette strolling near, contented in having so much time to travel in thought to her distant Gustave.

"Where do you go so regularly every pleasant afternoon, Madge?" her father asked.

"To see a nice lubbly old soger, papa, what is all shotted and it didn't hurt, and he tells lubbly stories, papa. Won't you come to?"

"What are his 'lubbly' stories about?" asked her father, flinging his cigar through the window.

"Oh! 'bout a little boy named Austin wiv brown eyes; and he was good once, but he's bad now an' awful rich."

A singular light came into her father's eyes, then quickly retired.

"All right, little girl;" he said, "I've nothing to do just now. Lead me to your 'soger.'"

Madge caught his hand, almost pulling him down the broad hotel-steps in her delight at his unusual attendance.

"Whoa! my one-in-hand," he laughed. "You're a bigger handful than my four-in-hand." And he tried to measure his steps to her tripping foot-lengths.

Under the elm, as usual, sat the old soldier. His gray hair was close clipped, his beard, white as snow, hung long and trim, and the blue and gilt of his hard-worn uniform was in dustless order. Even the medal was polished to a finer shine since it so constantly came under the inspection of Madge's bright eyes.

"There he is, papa!" she exclaimed, with a hop and skip forward. "Isn't he lubbly?"

"Wait till I see him nearer," responded her father, adjusting his eye-glass.

Now they were before the bench where sat the old soldier. Madge's father took down his eye-glass and looked sharply at the old man.

As sharp again and haughty and proud was the old soldier's look at him.

A deep flush overspread the features of Madge's father. The old soldier's face was as pale as death.

"Austin!"

"Father!"

Then they recoiled, and only Madge was smiling.

"This is my papa," she said; "he has come to hear about your little boy Austin."

The old soldier groaned. Her father seized her hand as if he would drag her away. She wrenched her hand from his grasp, puzzled, disturbed.

"The child is right, she should not touch you," said the old soldier, huskily. Madge's eyes traveled from one to the other.

"Will there be no story about Austin ever again?" she asked, with child-like intuition.

"No, little miss," the old soldier replied, reaching for his crutch. "Yet I shall die of loneliness because there is not;" and he hobbled away zigzag and stumbling like one blind.

Madge looked after him, holding out her hands. "I didn't say good-by, papa. I always say good-by to him."

The next morning the old soldier did not waken. They found him soon after; he was dead, a tear still glistening on his sunken cheek and his shriveled fingers grasping the medal wrapped in a bit of paper, on which he had scribbled with his left hand, "Give this to little miss."

There was not a soldier in the "home" that did not know who "little miss" was. Had he not talked of her morning, noon, and night?

Madge's father came slowly across the square from the soldiers'

home. It was the first time he had been there. Madge, still Lizette's pony, shook her lines and galloped towards him.

"Lizette is bad this morning, papa; she says my nice, lubbly, old soger is dead. Won't you make her stop?"

Her father pulled at his neck-tie as if it were choking him.

"Lizette is right, Madge, and he wanted you to have this."

Pressing the medal into her hand he hurried into the hotel.

The villagers were proud of the beautiful monument which Madge's father erected in the square to the old soldier. Spreading their chests as they filed past it, the soldiers of the home would say, "See how a brave veteran can be honored by the rich!"

M. Carrie Heyde.

THE PROTECTION OF OUR COMMERCE IN WAR.[1]

THE old year closed with alarms and excursions. In every quarter of the globe grave difficulties beset England, and she finds herself in ill odor with all the greatest powers of the world. France, if more cordial than usual, still ever asks, "What about Egypt?" Russia has treated our supposed advances with a cold contempt.[2] Germany is sulking at the attempt of the Uitlanders in the Transvaal to obtain the most elementary rights of citizenship. The United States have not receded from the position into which they have been forced by President Cleveland, and those who know assert that American public opinion, especially in the West, is against us. It is a melancholy fact, but there is no doubt that our very prosperity, the rapid and silent expansion of our empire, provokes a dislike, which is after all, when we think things over, not unnatural.

A state so unpopular, threatened by so many enemies, must be strong to stand. And the painful fact is that England is in appearance, even if not in reality, extremely weak. We are always being told that the British colossus has feet of clay; but few, perhaps, of us realize how vulnerable we seem to the foreigner. It is in our commerce that this vulnerability lies; for an England without commerce is, as MM. Montéchant and Z., the French strategists, assert, "a stomach without limbs," doomed to instant and speedy death. A great school of naval writers has grown up in France, who hold that we can be reduced to prompt submission by an organized and determined attack upon our trade. Following M. Gabriel Charmes and Admiral Aube, they consider that there is no need to attempt the defeat of our heavy squadrons of battle-ships. Swift cruisers, ruthlessly scouring the sea, giving British merchantmen to the conger eel, will bring down that proud island state with a crash. A disciple of this new school is now the French Minister of Marine. And in France, in Russia, and in the United States great attention during the past few years has been

[1] By permission of the Leonard Scott Company, the American publishers of the *Nineteenth Century*.

[2] *Novoe Vremya*, December 18 (30). "We see no reason why Russia should meet half-way the advances of England,—advances only too evidently founded on the well-known maxim of 'making a virtue of necessity.'"

given, or is at the present time being given, to the construction of fast cruisers with an immense coal-supply.

Naval programmes must inevitably disclose the strategic designs of their authors, and we should be very foolish to neglect the warning which they give us. A determined attack upon our trade is in course of preparation. It is for us to reckon the losses which such an attack might inflict, and, before it is too late, take steps to anticipate it and render it impossible. We may search history in vain for an instance of a state so wholly dependent upon the sea as England. The nearest parallel is to be found in the Southern Confederacy of 1861–65, but even that instance does not correspond in all its details. The air they breathe is not more necessary to human beings than is the free and uninterrupted passage of the sea for her ships to England.

We must see how much we stand to lose, that we may be nerved to a great effort to win security. This country, as the proverbial schoolboy knows, lives by manufacturing raw products into the finished articles ready for human use and conveying them over sea. Its financial stability exists only so long as its manufactured goods can be exchanged for food and fresh raw material. As we possess abundance of coal and a good supply of iron, whilst our climate is not wholly suited to wheat-growing, we have carried specialization to an extreme point, and refuse to produce our own food, preferring to do that which we best can do,—manufacture. We have deliberately chosen an economic policy which will conduce to this end. The repeal of the Corn Laws sacrificed our farmers to our manufacturers. The repeal of the Navigation Laws opened our ports to the world. Free trade in raw materials gave our mills the wool and cotton which they required at the lowest possible price. And as the corn we eat makes one voyage, and the raw material two,—one to and one from these islands, the last in the shape of cloth or calico or machinery,—the shipping trade received a treble bonus by our policy. "Ships, colonies, commerce," the historic watchwords of English statesmen, were thus favored, at the expense of the landed interests. Free trade subjected us, as time went on and other nations began to manufacture, to the fiercest stress of competition. We have on the whole held our own, though we still remain the only regenerate people in a wilderness of protection.

"We reverted from the pursuit of power . . . to the pursuit of plenty," says Professor Cunningham. "We can but trust that by pursuing plenty we may find that we are supplied with the sinews of power when we come to need them." Political economy is an admirable science, but its devotees are only too much accustomed to overlook practical facts. They do not always take sufficiently into consideration in their theories such stern realities as war, or the paramount interests of national defense. In the debates on the repeal of the Corn Laws Mr. Bateson did indeed ask how the government would answer the cry

of the despairing multitudes if wheat cultivation died out at home, as it is dying; and if at any time our marine supremacy were seriously challenged. Disraeli, as he then was, reminded the House that corn could not be imported till we were masters of the sea, and that on two occasions there was absolute famine, concluding with these words: "I want to know whether it would be politic again to face such risks." For in the Napoleonic war of which he spoke with such comparatively fresh recollection England at least fed herself. In the year 1800, when an unusual amount was imported, 1,293,000 quarters of corn came to her from abroad. In this amount, be it remembered, was included, besides wheat, oats, barley, and rye, which, owing to the rise in the standard of living, are now very little used by man. Our consumption of corn, as estimated by Dr. Colquhoun in 1812, was 35,000,000 quarters. Therefore it is safe to say that nineteen-twentieths of our corn was home-grown. In 1894, with only a trifle over 1,900,000 acres under wheat, we produced 7,300,000 quarters at home, importing 16,310,000 quarters of wheat grain, besides 19,130,000 hundred-weight of flour,—that is to say, a total of 21,000,000 quarters, allowing for flour. In 1894, then, three out of every four Englishmen lived wholly upon foreign bread. In 1895, owing to the tremendous reduction of the area under wheat, not one in every five drew his bread from the country.

Our daily bread comes to us from abroad. But this is not the only necessary which we import. Of food stuffs which might conceivably be produced in the country we purchase from the foreigner nearly half our meat; nearly £16,500,000 worth of butter and margarine; £6,070,000 worth of fruit and hops; £5,400,000 worth of cheese; £3,780,000 worth of eggs; £1,000,000 worth of potatoes; £778,000 worth of poultry; £1,090,000 worth of vegetables. In addition to these there are the various kinds of colonial produce, of which sugar alone could be grown in England. A small rise in each of these items would inflict innumerable hardships upon our working population. A great rise would mean starvation. Generations of peaceful development have bred in us a belief that England will never be seriously attacked, and that the navy may with safety be starved. We forget that a fresh and even more importunate burden than the safeguarding of our raw material and manufactures has been laid upon it in the need to watch over our food-supplies. . . . .

As for raw material, we must have cotton, wool, flax, iron, silk, hemp, leather, and wood for our manufactures. The weaving and spinning sheds of Lancashire and Yorkshire would be paralyzed if the foreign supply of wool and cotton were cut off. Stoppage of sea trade, Lord George Hamilton calculates, would affect 4,721,000 heads of families or workers. It would ruin the country. One very sharp lesson we have had in the cotton famine, when one single industry was

deprived of its raw material. Pauperism increased in Lancashire by one hundred and forty per cent., and had not the rest of the country, with unimpaired resources, come to the aid of the operatives they must have perished of hunger. But what if the calamity were general instead of local? What if every trade and every industry were thus smitten,—if, concurrently with this economic bankruptcy, we were undergoing the pressure of an arduous and bloody struggle; if our vast shipping trade had passed from us, pouring fresh mouths upon our empty granaries at home?

It may be said that our commerce could scarcely be driven from the sea, and that with our naval strength we could hold our own. But here again we know our own strength or weakness; and even supposing this sufficient to carry us through a struggle with a single power, who knows what combination may assail us? Besides, I have in vain searched naval literature for any indication that the true naval experts —*i.e.*, the men who will have to do the fighting—consider our navy able to defend our commerce against the assaults of even the strongest power after ourselves. Captain Eardley-Wilmot, writing in the *Navy League Journal*, says just the opposite. "I consider that fifty cruisers of different types should be commenced without delay." Englishmen who care for their country should study his article and note his conclusions. We cannot protect our commerce as we stand.

In the past, if we look at history, we shall find that our shipping was very fiercely assailed, and that even when our fleet possessed an enormous military superiority we could only partially and imperfectly protect it. In the war with our revolted American colonists the depredations of a few insignificant cruisers, in the face of a navy mustering one hundred and twenty-six ships of the line, one hundred and twenty-four frigates, and five hundred smaller vessels, brought the most ruinous loss upon us. Macpherson, in his *Annals of Commerce*, notes that as early as 1776, before France, Spain, and Holland had joined our enemies, insurance on homeward-bound West India ships rose to twenty-three per cent. And on the 27th of May, 1777, he writes,—

"The American cruisers now covered the ocean, and even infested the narrow seas of Great Britain and Ireland. Ships were taken in sight of land; the communication between England and Ireland was interrupted; and a convoy was actually appointed for the protection of vessels bringing linen from Ireland, which had never been necessary in any former war. . . . Another sight, not less melancholy than new, . . . was exhibited on the river Thames, which was covered with foreign vessels, and particularly French ones, loading for various parts of the world with British cargoes, the skippers of which were now afraid to trust their property under the protection of the British flag."

The rise in the price of sea-borne goods which accompanied this state of things is full of warning to us. Sailors' wages, as we should expect, doubled to meet the risk of capture. Potash leaped from eight

shillings a hundred-weight to seventy shillings; spermaceti from seven hundred shillings to fourteen hundred shillings a ton; and tar from seven shillings the hundred-weight to thirty shillings. Fortunately for ourselves, with Europe against us, we were then self-dependent, and so our losses were, in Captain Mahan's words, "worrying, not deadly." There was none the less a decline in our prosperity, and in 1781 the number of houses which paid the window tax was smaller than it had been in 1750. Good luck, the strategic and tactical mistakes of our enemies, and the dogged valor of our seamen alone saved us from national ruin. We emerged in evil plight, but still substantially sound, and we were given some very valuable years of peace to recruit our strength for the great struggle with France.

This opened in 1793, and was protracted, with the exception of the short break due to the peace of Amiens, for twenty-two years. We started with 16,073 ships, of 1,540,000 tons, manned by 118,000 men, and with a navy of one hundred and forty-one ships of the line, one hundred and fifty-five frigates, and one hundred and twenty-nine small vessels. We had to deal with a thoroughly inefficient enemy, disorganized by revolution and distracted by intestine quarrels. From the first hour of war our military superiority was unchallenged. The declaration of war, however, caused a very serious contraction of trade. There were many failures, and a temporary loan of £5,000,000 was necessary to avert panic. This measure had a most salutary effect, and only £3,855,000 was applied for. Early in the struggle the attack upon our commerce began. Ships of war and privateers of all sorts fell upon it. Row-boats put off to merchantmen lying becalmed in the Channel, or under the Forelands, and carried them by boarding. Sourcouf in the East Indies swept into his net not only helpless sailing ships, but also large and heavily-armed Indiamen. In 1805 the Rochefort squadron got to sea and took in five months four war-ships and forty-two merchantmen. "In 1810," says the *Naval Chronicle*, quoted by Captain Mahan, "signals were out almost every day at Dover, on account of the enemy's privateers appearing in sight." In 1800, the same authority tells us, there were eighty-seven large French privateers in the Channel ports of France alone. From first to last the French captured eleven thousand ships, with their cargoes, worth £200,000,000, a toll of two and a half per cent. at the very least on our trade.

At first sight this loss does not look particularly heavy, and it certainly had no effect upon the issue of the war. It was only so much property destroyed that might, if spared, have added to our wealth. We annihilated French trade, so that Napoleon could not even send a cockle-boat to sea, as he himself confessed, and we captured no less than one thousand and thirty-one privateers, carrying nine thousand four hundred guns, and manned by sixty-nine thousand men. Thus we lost

an average of five hundred and fifty ships a year, and took less than fifty-five a year of the depredators. Neutrals, it will be observed, lost by peace and gained by war. From 1790 to 1793 the average clearance of neutral shipping was under 200,000 tons. With war it rises as rapidly as British tonnage declines. It falls with the peace of Amiens, when British tonnage bounds up. It falls under the joint influence of the English orders in council and the Milan decree. It rises in 1809 and 1810 with the narrowing of the paper blockade proclaimed by the orders in council of 1806 and 1807, but declines with remarkable rapidity during 1812–14. These were the years of England's war with the United States, which killed the American mercantile marine. But our shipping suffered too, though not so heavily.

For besides the losses by capture on the high seas, besides the fact that our tonnage did not show a healthy and regular expansion, there was the indirect pressure of convoy acts and heavy insurance, not only upon our ship-owners, but upon the nation. In 1803 the British owners complained that "so long as they continue to be burdened with tonnage, convoy, port dues, extra insurance, heavy taxes for docks, canals, tunnels, and a thousand other water-brained schemes, they will continue to drag out a miserable existence." In March, 1804, Lindsay's "History of Shipping" tells us that there was scarcely a single offer of trade for British bottoms, except in coasting and colonial trade, which were secured them by the navigation laws. "The smallest difference in freight gave trade to foreigners, and British ships rotted in harbor." It is the same cry, recurring with the same warning. And at home the price of necessities was rising,—rising incessantly. The price of corn oscillated, just as the tonnage cleared oscillated, but it was ever upon the upward line. In 1795 the harvest failed, and a great bounty was paid upon imported corn,—sixteen shillings to twenty shillings a quarter,—but only with difficulty was the food got into the country. The quartern loaf at one time touched one shilling ten pence, or six times its present cost. For whole months in 1812 it stood at one shilling eight pence. That year, indeed, was one of critical importance at home. An empty belly knows not patriotism, and there were ominous disturbances in every direction.

The misery which the rise in the price of bread and meat, concurrent with the fall in wages, brought to the working classes of Lancashire and Yorkshire still lives in North Country tradition. Wages at thirteen shillings a week, bread at one shilling eight pence a loaf, produced the Luddite riots. Machinery may have been the ostensible cause, as, perhaps, it was the fancied author, of this suffering. But Mr. Baines, a contemporary historian and a Yorkshireman, in his account of the French revolutionary epoch, mentions the dearness of food as a Luddite grievance. And a careful examination of the *Annual Register* will make it clear that famine was in only too many

instances at the bottom of the mischief. The brave, patient, ill-used artisans of the day were simply starving. They could not endure longer, and so they rose. Who are we that we should blame them?

At this dark hour the United States had attacked us,—with right on their side, it must seem to us now. But we were fighting hard in a life and death struggle, and like men in such a case were resolved to strike home, though we injured others in so doing. There followed the least glorious war—so far as externals go—that we have ever waged. Our commerce was yet more grievously plundered. Two thousand ships were taken from us, and in a half-dozen frigate actions, with the odds uniformly against us, we were badly beaten. None the less our sea power did what it always did: it cleared the rising American merchant marine out of existence. That is what caused the sharp drop in neutral shipping from 1810 onward. There were now no neutrals left to fetch and carry: England's shipping alone survived the storm; and the iron tenacity of the aristocracy, which had carried us through this generation of fearful blood-shed, reaped for the nation which had borne so much a great and well-deserved reward.

So far what are the inseparables which war brings to the trading nation, even when its naval superiority is unchallenged? They are a rise in the price of sea-borne goods, a diminution in the native tonnage cleared, and a corresponding gain to the neutral tonnage. On the other hand, the sea power annihilates its enemy's commerce.

In the war between the Northern and Southern States, which raged in America during 1861–65, we have the only instance in which steam cruisers have been employed on any scale to harry commerce. The South had no commerce to be attacked, but the North had a large and prosperous merchant marine. From first to last the South sent eleven steam cruisers and eight small sailing cruisers to sea. These captured between them two steamers and two hundred and sixty-one sailing ships,—not a very heavy bill of loss, one would think. Yet this loss practically drove the United States flag from the seas. To prove this I will quote from the case of the United States, as presented to the Geneva arbitrators, the following facts: "In 1860 two-thirds of the commerce of New York were carried on in American bottoms; in 1863 three-fourths were carried on in foreign bottoms." And the transfers from the United States to the British flag were enormously large. They were,—

	Ships.	Tons.
1861	126	71,673
1862	135	74,578
1863	348	252,579
1864	106	92,052

War ended in April, 1865.

The mediocre "Alabama," a single small and ill-armed ship, was the cause of most of this loss. There were, no doubt, other contrib-

uting factors, but the effect of her career is plainly marked in the sudden increase of transfers during 1863, when she was at sea. After she had been sent to the bottom Yankee skippers recovered their breath. The trade, however, had departed, and the United States have never regained the position which they held in 1860 as a shipping nation. Here, again, the destruction of helpless Northern ships in no wise benefited the South. It wrought individual ruin, and it embittered the relations between England and the United States: it had no strategic result, as the North was self-dependent.

Such, then, are the facts in regard to commerce destruction in the past. But do the laws of the past apply to the present? Is it true to-day that we might lose much without losing all? In other words, would such losses as France inflicted upon us in the Napoleonic war bring us down, under the changed circumstances of modern economy? I must confess to a fear that they would, should we allow them to occur. At the beginning of this century we were the only manufacturers in the world. In 1792 hardly a spindle or loom was making cotton on the continent. Europe was distracted by continuous war, and there was not a single country on the main-land which was not invaded. England, isolated and secure, was able to develop the mechanical inventions of Watt and Arkwright. This state of insecurity abroad, contrasted with the tranquillity which the sea gave us, acted as a stimulant to our manufactures before the war began, and maintained them whilst it continued. The world was at war. There were practically no neutrals from 1793 to 1815, except the United States, and before the improvements in transport the States could not hope to compete with us in Europe, even if they had had the manufactures. At the present day we are not likely to be at one and the same time engaged in war with the great manufacturing countries of the world, at least so long as we possess statesmen, and therefore there will be neutrals—perhaps numerous neutrals—with all the appliances for manufactures. If we can only just make head against their competition in peace, how will it be when our trade is liable to the interruptions and burdens of war?

In the Napoleonic war the neutral, as we have seen, gained, till we turned upon him and destroyed him, whether by orders in council or by the unwarranted acts of our cruisers, or by open war. We could not, as we now stand, deal with neutrals as we did then. Rather the neutral will limit yet further our belligerent rights. He is the true gainer by war, and since his shipping will be able to offer complete security to our goods or to any one else's, it will naturally be employed in preference to ours. We own some fifty-eight per cent. of the world's carrying power, and transfers will be very difficult in war, so that our shipping must still be in demand, at least at the outset. But if the war lasts, and we are much plundered, it is highly probable

that a vast tonnage will be built and added to neutral marines, whilst ours will correspondingly decline. It will be of the utmost importance, therefore, at the outset to demonstrate our ability to protect our flag, and to win the confidence not only of our home but also of foreign shippers.

The other two points of contrast between 1793–1815 and 1896 are rather technical, but they must none the less be stated. In our last war we had not to encounter a powerful, a well-drilled, and a well-officered navy. The difference in quality between the English and French fleets left no room for doubt as to what would happen when two approximately equal forces met. For ninety years France has been at work remedying the fatal errors which led up to Trafalgar. She has built up a fleet for its size second to none, and those who disparage it are not the men who know anything about it. In numbers it is inferior to ours, but not more so than was her fleet in 1793. She has repeatedly led us in matters so important as the adoption of armor, of breech-loading ordnance, of swift cruisers. It is not certain in organization she is not ahead of us to-day. She has never, at any time in her history, possessed such officers and men as uphold her honor to-day. A contest with these men will be a very different affair from the battles of 1798 or 1805. I have elsewhere expressed my firm belief that only by numerical superiority can we be sure of winning. Englishmen are not invincible, nor are they by nature braver or stronger than other races. To believe that they are is to rush to defeat.

Last in the lists of contrasts I would allude to Cherbourg. This port is a new creation, and is exceptionally well placed for harassing our trade in the Channel. Captain Mahan considers it a factor of great importance in the balance. It is so enclosed by breakwaters as to be inaccessible to torpedo craft. It can only be attacked by a long-range bombardment, the efficacy of which is a moot point. At Dunkirk is a second strong port, though not a dock-yard. The creation of these two harbors has materially improved the French strategic position in the Channel.

The economic factor is and must be of enormous importance in war. There is no denying the fact that we have deliberately sacrificed our self-dependence. Protection, says Professor Bastable, is founded upon the national idea. It is a military precaution. And he, a warm supporter of free trade, in a remarkable passage warns us that "economic autonomy is as important a weapon as military or naval power. The strongest army or the best equipped fleet will be useless if the supply of food runs short, or if the industrial functions are paralyzed by want of sufficient raw materials. *The maxim, 'In time of peace prepare for war,' will cover the application of protection for the purpose of securing an adequate supply of food and raw materials from the*

national territory (the italics are mine). With the experience of the great Continental wars fresh in men's minds there was some excuse for the effort to make the soil of England supply food for its population."

Some excuse, indeed! but *vestigia nulla retrorsum*. We cannot repeal the Corn Laws. Still we can and must see that our navy is strong enough to assure us cheap bread, cheap cotton, and cheap wool. With an expenditure proportionate to our risk we can be safe.

Matters are complicated by the existence of a large population within these islands on the verge of starvation in normal peace times. Mr. Hobson estimates its number at two million souls. And in London and most of our large towns is a dangerous and undesirable foreign element, which may in war prove turbulent, and which we shall have to feed or expel. Experience shows that hunger is the one thing which human beings will not cheerfully endure. Our government is to-day swayed by those who will feel the pinch, and who, feeling, may act and demand at any cost submission. Let us once more recall the fact that we have a bare twelve weeks' food at home, and that we certainly do not possess supplies of raw material for our manufactures which would carry us through six months. It was difficult to obtain wool in the war with France of 1793–1815, when we grew at home the great bulk of the quantity required. How much more so in war to-day.

The outbreak of war will assuredly reduce the tonnage of shipping available, and so send up the price of freight. This is inevitable. For first of all our sailing tonnage must go: it cannot hope to keep the sea against steam cruisers. This at once wipes three million four thousand tons from the world's carrying power. Then, if France is against us, or France and Russia, their marines must inevitably vanish, or be converted into cruisers. Reckoning one steamer ton as equal to four sailing tons, which is the usual equation, ten per cent. of the world's sea transport has by now disappeared. Add to this purchases of foreign steamers for use as cruisers by our enemies, and the large number of ships which we *must* take up for war purposes, and the shrinkage will be nearly fifteen per cent. By Gregory King's well-known law of prices this will send up freights by five-tenths, or fifty per cent. Food then will rise slightly; raw materials will rise; and finally manufactures produced from these dearer raw materials will cost more to carry to the consumer. Where the consumer has manufactures of his own ours will be less than ever able to compete.

The second item in the cost of sea-borne goods is insurance, which covers the risk of loss arising from internal causes,—fire, unskillful navigation, or bad construction,—and that from external causes, which are shipwreck, collision, and hostile cruisers. All these items except the last are constant in war and in peace. All except the last can be

calculated to a minute fraction and allowed for. Mr. Danson, who alone has written upon this most important subject from the national point of view, has told us with the authority of an expert that there is no possible means of foretelling the risk of capture in war. There are no tables to serve us at our elbow. I do not know that the experience obtained by the American underwriters in 1861–65, by the Prussian in 1864, by the French and German in 1870, has ever been published. Even if it had been it could only help us to guess. So that in a matter of the supremest importance we are practically without experience or information.

Here again everything depends upon what happens at the beginning of the war. The steamers of the Messageries Maritimes and of the Russian Volunteer Fleet are everywhere ready, waiting the slipping of the leash. A word over the cables and they are at the work. Half a dozen such ships might in a few days send up the insurance rate by the influence of panic to twenty or twenty-five per cent. Nothing is impossible.

On the top of the rise in freight, then, comes the violent rise in insurance. And on the top of this again will come speculation and the action of that remorseless law of Gregory King, that with each decrease in the supply comes a geometrically increasing rise in prices. There is no need to picture the result of a sudden trebling of the price paid for every necessary and for each pound of raw material. It means only one thing, if it cannot be promptly counteracted, and that is the instant decline of our manufactures, the instant shrinkage of our national income, swift starvation for our masses,—in a word, national death.

The changes of the present century, however, have not been entirely in our disfavor. With steam, convoy is vastly more easy of employment than it was in the past. The rate of speed differed widely in different classes and kinds of sailing-ships; great intervals had to be kept, and the pack of ships was helpless if suddenly attacked. Now, as Admiral Colomb has pointed out, each steamer has a very formidable weapon in her ram. The whole number can be kept together, steaming at a low but identical rate of speed, and the convoying ships can come promptly up if attack is threatened. Telegraphic communication has made the world smaller, and so it will be easier to find the hostile cruisers, always supposing that the wires are not cut. Steam has greatly reduced the duration of voyages, though this has been counteracted, as I have noticed, by the greater distances from which we now draw our supplies. Privateering has been, in name at least, abolished. There are numerous expedients, however, by which the treaty of Paris can be eluded. Fast ocean steamers are held at the disposal of almost all the great powers, ready to hoist the national flag and go to sea with crews of reservists. The state may also purchase, or nominally pur-

chase, mercantile steamers in any number, and place on board them crews wearing its naval uniform and officers carrying its commission. Again, the transfer of shipping is now extremely difficult, as most governments require that a certain proportion, usually a large one, of the crew on board ships hoisting their flags shall be of the same nationality as the flag. Transfer of shipping under such terms means sale at a ruinous loss.[3]

In another direction naval progress has worked partly for and partly against us. Steam has on the one hand added an element of certainty to blockades by eliminating considerations of weather. It has thus facilitated the close blockade of a hostile port, and freed ships from the peril of a lee shore. The great advantages which its use has bestowed were clearly seen in the American Civil War. On the other hand, since that date, the torpedo-boat has greatly developed, and the serious menace which it offers may prevent the blockader's heavy ships from closing in upon the blockaded port. It will not be unreasonable to suppose that these two factors have neutralized one another, and that in practice blockades with steam will be much as they were with sails, at least till the blockaded enemy's torpedo flotilla is crushed. If this supposition be correct, isolated ships will be able to get in or out of the blockaded ports on dark nights, though the escape of large squadrons will still be extremely difficult. In a word, the fast commerce-destroyer will be able to leave and enter. But if every port is carefully watched by cruisers, she will be unable to send in her prizes, as privateers did of old, for presumably these prizes will be slower than herself. And she may have difficulty in obtaining fuel, though it is just possible that she might succeed in coaling at sea from prizes once or twice, or that, if fitted with furnaces which burn oil, she might be supplied at sea by neutral ships with this combustible, which is easy of transfer. But the question of fuel-supply must necessarily be a difficult one for any power to solve that does not possess coaling stations.

The attack upon our commerce will be made by four distinct classes of ships. There will be the war cruisers proper, vessels of fifteen to eighteen knots sea speed, and heavily armed. There will be the commerce-destroyer, specially built for this purpose, very lightly armed, but capable of a very high speed. The United States have in the "Columbia" and the "Minneapolis" two of this class, whilst France is constructing two more in the "Guichen" and "Châteaurenault." Thirdly, there will be armed steamers of all classes and sizes, but generally those of a high speed, over seventeen knots. Our enemies may buy largely, even in England, at the last minute, and they may seize fast English ships if any are in their ports We should probably do the same if the rats walked into the trap. But we shall certainly not be the aggressors, and therefore our enemies will choose their own time

[3] Admiral Colomb.

for the attack, and will make it when circumstances are most favorable to them, after giving hints to their steamer captains of what to expect. Lastly, there will in the narrow seas be torpedo-boats of the larger classes, ready to blow up defenseless merchantmen. If they sink liners with non-combatants on board, as they may do, there will be stern retaliation, no doubt, but this possibility will not deter men anxious to distinguish themselves from striking deadly blows at us.

It is now time to pass in the briefest review the forces known to be available on either side for the attack and defense of commerce. This will be best done by a table of cruisers, nominally steaming seventeen knots and more, and mail steamers whose sea speed is seventeen knots or over. The figures are,—

	Great Britain.	France.	Russia.	German.	United States.
Armored cruisers { over 10,000 tons	0	1	4	0	0
Armored cruisers { under 10,000 "	7	6	2	1(?)	2
Unarmored cruisers (modern) { over 9000 "	8	0	0	0	0
Unarmored cruisers (modern) { 6000–9000 "	9	4	1	4	10
Unarmored cruisers (modern) { 3000–6000 "	45	22	2	3	6
Unarmored cruisers (modern) { under 3000 "	19	17	0	1	2
Torpedo-gunboats	32	15	8	2	1
Commerce-destroyers	0	2	0	0	2
Large steamers, 17 knots and over	48	18	3	14	5
Large torpedo-boats	105	55	72	75	18
Total	273	135	92	100	46

The figures for "large steamers, 17 knots and over," are from *War Ships of the World*, 1894, with certain additions.

All ships building, or known to be projected for 1896, are included.

As a contrast with these figures, in 1804 we had two hundred and forty-four frigates to the French thirty-two, or nearly *eight to one.* History shows us that the cruiser is wanted everywhere in war, with the squadrons of battle-ships to scout, to patrol the sea, and to give convoy. Even with eight to one we had none to spare, and our commerce was plundered. How would it be to-day? We can see clearly that unless we protect our commerce, and protect it better than in 1804, it would go ill with us. We can realize that our force of cruisers is wholly inadequate. And from the economic facts which have been put forward we can understand that the vulnerable point in our armor is not the Sussex coast or the mouth of the Clyde, but this defenseless shipping going and coming upon the high seas. Our first necessity, if we are to safeguard it, is a fleet able to blockade or at least mask our enemy's ports. Whatever the difficulties of such a blockade, whatever the superiority of force requisite, we must overcome the one and possess the other. Until we blockade, the sea is everywhere open to the enemy, and his cruisers can threaten our coasts, plunder our commerce, ruin

our manufacturers, and starve our artisans and operatives. As soon as we blockade, though we do not altogether prevent his fast ships from taking the sea, we yet hamper them in their operations, and deprive them of their plunder. I am not going to enter into a disquisition upon the relative strength of England and her naval rivals, nor am I going to discuss the force requisite for a blockade. The Committee of Admirals who reported upon the manœuvres of 1888, the late Admiral Hornby, and Captain Eardley-Wilmot all demand far more battle-ships, for the work of shutting in the fleets of France alone, than we possess or are building. It seems then that we cannot blockade, and are going to incur a tremendous risk. What would happen to our commerce if we had to face an alliance without allies ourselves?

The building of the battle-ships and cruisers, which are needed to give us the power of blockading the enemy and covering our commerce, and which I may presume that the present government will lay down with the least possible delay,[4] will, however, take time. Still more time will be wanted to train the officers and men who are to work and fight them. Under exceptional circumstances a fifteen-thousand-ton ironclad can be completed in two years, or perhaps a little less. But under no circumstances can a good seaman gunner be trained in much less than four years, or a lieutenant in less than seven or eight, unless we greatly lower our standard of efficiency. Never has training been of more importance than to-day, when war is so largely a matter of machinery, and when the weapons in use are so complicated. Compulsory service places at the disposal of most European powers very large trained reserves, which are almost wholly wanting in England. Whatever the zeal and ardor of our naval reservist, he must, with a far shorter period of service, if his training can be called service, be inferior to the "inscript" who has passed three or four years upon a man-of-war.

Whilst, then, men and ships are being provided, what can be done, since war may come upon us long before the navy can be brought to the required strength? National insurance of shipping has been suggested as one remedy. That is to say, the state would compensate the underwriter or ship-owner for the loss of any vessel through the action of the enemy. This would counteract the rise in insurance, though obviously it would not affect the rise in freight, as no government would care to be responsible for sailing vessels. It would be a very heavy drag upon our finances, since two and one-half per cent.,

[4] In spite of Mr. Goschen's assertion that no "sensational" measures will be taken, I cannot believe that the members of the present government are blind to our weakness, or forgetful of the standard which they themselves have proposed. But to attain that standard "sensational" or exceptional measures are an absolute necessity. In 1804 we had one hundred and seventy-five battle-ships to the French fifty. To-day we have only fifty-two to their thirty-four (it should be thirty-six, adding in iron-clads recently laid down).

the loss inflicted in the Napoleonic war, upon the value of our imports, exports, and shipping would come to £20,000,000, a year of dead loss, at a time when we should be paying war taxes. If the captures were numerous it might reach a far higher figure. It can therefore only be a temporary expedient, a heavy fine paid in war for the omissions of peace. One-fourth or one-fifth of the sum annually added to the estimates in peace would be a far more effective insurance, tending not only to give thorough protection to our shipping when war came, but also to make war unlikely. Nevertheless, insurance of this kind will be absolutely necessary with a weak fleet, and arrangements should be made with ship-owners for its speedy proclamation on or before the outbreak of war.

A second precaution which is not beyond our means is the arming of our auxiliary cruisers. At present their batteries are left on shore. There are twenty-six sets of guns, eight each at Devonport and Woolwich, four each at Portsmouth and Hong-Kong, and two at Sydney. Thirteen of the sets are composed of guns which are already obsolete. Both French and Russian auxiliary cruisers, when upon long voyages, carry their armament and ammunition as ballast in the hold, and are manned by crews of reservists. All they would have to do, on the outbreak of war, would be to place their passengers and cargo ashore at the nearest friendly point and get to work. The British mercantile cruiser—if, for instance, at the Cape—would be thousands of miles from her guns, and when she had obtained the weapons might very conceivably be without men to fight them, as she does not carry a crew of naval reservists. She might, of course, take on board officers and men from the obsolete gunboats and sloops which we maintain on foreign stations. But even so, the guns are wanting. Either, then, we should place armaments at all the important coaling stations, or else see that the weapons are on board the ship. The crew of reservists can, so far as I can see, only be obtained by a government bounty paid to the ship-owner. It is a question of national security, and till our navy can be brought up to our requirements the nation must be content to pay.

If, in addition, a certain number of small quick-firers, of 12-pounder size preferably, were held ready at our coaling stations to be placed on board our slower and smaller "tramps," and if their crews were trained in the use of these guns, whilst the ships were loading or discharging cargo, there would be some protection against the attacks of small craft such as torpedo-boats. But the enormous number of foreigners in our mercantile marine, amounting by various estimates to sixteen or twenty per cent. of our whole number of seamen, is here a great source of weakness. For can we trust Germans, Swedes, or Finns to defend British property from German, or French, or Russian attacks? The elimination—as far as it is possible—of the foreign

seaman seems to be a matter of urgent national importance.[5] It might be achieved by a heavy poll-tax on foreign sailors, side by side with a counterbalancing bounty on British reservists shipped. But it would certainly provoke great opposition from the ship-owners, who are already much harassed by restrictions.

The arming of merchant ships can only be a temporary expedient till the navy is strong enough to give that thorough protection which will be required. Something might be done to add to the present strength of our foreign squadrons by eliminating ships which are designed only for peace service. Of such craft, mainly old cruisers, sloops, and gunboats, there were, on the 15th of January, sixty-three in commission. Take the Pacific Squadron for example. It is composed of six ships, of which the "Royal Arthur" alone has any very serious military value. She is a splendid vessel, fast, heavily armed, and well supplied with coal; but what of the craft which support her? The "Comus" is an old and slow cruiser, with coal for only three thousand eight hundred knots at best. The "Icarus," "Satellite," and "Wild Swan" are aged sloops, quite useless for convoy or fighting. The "Pheasant" is a slow gunboat with a great deal of wood about her, and a feeble battery. In fact, these five ships exist merely to perform the duties of police in peace, and they cannot in war be converted into fighting ships. One modern cruiser—and we have twenty-two at this moment idle in our dock-yards—would be far more serviceable in war. Would it not, then, if peace duties imperatively demand the employment of these old ships, be well to place modern cruisers, to which the crews of peace-service ships could be transferred on the outbreak of war, in reserve at our distant stations? As it is doubtful whether we can man all our ships at home, some estimates requiring one hundred and twenty-seven thousand men for the vessels built and building, I cannot see that we should lose by such a measure. We can always, with war upon us, pre-empt cruisers building in England for foreign powers, and thus promptly reinforce our fleet. So, to pre-empt ships without urgent necessity would, however, render foreign navies unready to place orders with English builders. I say this because the measure has been pressed upon us lately. Our statesmen may be trusted to act if there is real need: till then let us build as much as we can for the foreigner.

I do not think that the constructor has had his final say in the matter of ships which shall be suited to the requirements both of peace and war. They are antagonistic, yet it is possible that in the near

[5] According to Lieutenant Edwards (U.S.N.), a Russian naval officer told him, "In case they [the Russians] ever had trouble with Great Britain, one of the first things to be done would be to drive the Chinese out of the English fire-rooms. If no other method could be found, they would declare such men pirates and hang them upon capture." As all our lines to the Far East employ a good deal of Chinese labor, this would cripple us greatly. Of course it would be a breach of international law.

future we may get the type we want. This would in itself be a great addition to our strength, as the leading navy must to all time police the sea.

Disguise in war is another means by which captains of merchant ships may elude attack. A little dexterity, some use of canvas, the fitting of dummy tops, the mounting of quaker guns, would, I should imagine, render a weak hostile cruiser very chary of attack. As facilitating disguise and rendering capture of corsairs easy, it would be well to build our cruisers as much like merchant ships as possible. The United States have sought in the "Minneapolis" to obtain this resemblance to a "liner" which is a sensible proceeding on the part of the assailant. It should be checkmated by the assailed.

To enable our squadrons to discover the whereabouts of hostile cruisers, the telegraph will be of inestimable value. Here, unfortunately, there are serious gaps in our system and great lines, the use of which depends upon the good-will of neutrals. Our West Indian Islands are connected with the United States by a line which passes through Cuba, and which is at present interrupted, owing to the Cuban insurrection. It would be useless, even if Cuba were pacified, should the United States assume a hostile attitude. It is therefore a matter of some urgency that the cable which runs from Halifax to Bermuda should be continued thence to Jamaica. Again, our whole Eastern and South African system depends upon the friendship of Portugal, as all the cables touch at Lisbon. This, perhaps, does not much matter, since Portugal, so long as we are supreme at sea, will be our friend. But if we allow the possibility of a disputed command of the sea, Portugal may be driven into an attitude of hostility, when we are cut off from the east and south. To avert such a disaster the proposed Pacific cable from Vancouver through the Fiji Islands, at present unconnected, to Australia is needed. Again, such an important point as Mauritius should not be overlooked. It is a coaling station, a strategic position of the utmost value, on the high road from India to the Cape. As such it should be linked by a cable with Natal.

Little but money is required to fill these gaps, and even from a commercial point of view the new lines proposed might soon pay their way. They would greatly improve our position. It is possible that some of our cables might be cut in war, though experts differ in opinion upon the practicability of this. It is hardly likely that all will be severed, and thus the more perfect we make our communications in peace the less annoyance shall we suffer in war, as then the cutting of one or two lines will not bring us to a stand-still. Further, we want a dock in the Central Atlantic greatly. The stretch of ocean where South America draws nearest to West Africa was the chief scene of the "Alabama's" depredations, and must necessarily be watched by us with care. Our cruisers will not be able to rest upon Gibraltar as a

base, since the single dock there will be fully occupied with repairs for the Mediterranean fleet. Cape Town is too far off, and will also have to keep a considerable squadron in order. On the other hand, it is difficult to know where to place the required dock-yard, as the climate of our West African possessions is deadly to the white man, and a dock-yard is useless without artisans. Chinese or Indian labor might possibly be imported and trained; but failing this a close alliance with Portugal and the construction of the necessary accommodation at Cape Verde Islands seems our only alternative. Indeed, Portugal owns the bases which control the Central Atlantic, and for our own safety her friendship must be had. A guarantee of her African possessions might secure us what we want.

Another most important matter is to discover how neutrals will treat belligerent cruisers. Will they allow them to coal? The "Sumter" coaled at St. Anne's, Curaçao, the "Alabama" at Blanquilla, and the "Vanderbilt" in her chase of the "Alabama" at numerous British ports during the American Civil War, and nothing unpleasant was said. Will they allow them to use their dock-yards? We permitted France, in the Franco-Chinese War of 1884–85, to refit her ships at Hong-Kong. These questions must be answered in one way or another before we can know exactly what we shall have to do, and what attacks to face. Mr. Danson has suggested that neutrals should be invited to express their opinions before war comes. I trust that his suggestion has been carried out.

The last and most important measure—pending great additions of ships and men to our fleet—is a thorough concert with our large shipowners, and the stationing of ships to be used as convoy at various points. In the Napoleonic war we resorted to two forms of protection, by convoy and patrol. Our foreign squadrons will be able to look after the work of patrol when they have caught and smashed the hostile squadrons. But convoy must be provided from our strength at home. Mr. Lawrence Swinburne has suggested a measure, which I have elsewhere advocated,—the selection of our older and slower ships for this duty. Unfortunately many of these vessels have only a most indifferent coal-supply, which will seriously limit their sphere of action. Dividing them into two classes, according to their coal-supply, we have twenty-three ships with a fair, and eighty—mostly old, feeble, and slow craft—with a bad coal-supply. We might not be able to spare all the twenty-three better ships, but as many as possible should be placed where they will be wanted. Lieutenant Crutchley has prepared a scheme to which it may be assumed that the Admiralty will pay full attention. And we should hold a squadron of fast cruisers ready and in commission at home to proceed instantly to the succor of commerce or the observation of hostile ports. Our Channel and "Particular Service" squadrons are very strong, but they are not likely to be able to spare their cruisers

in time of war; and if we trust to mobilization, we may suffer very heavy losses before our ships can get to sea. In our position, whatever the cost, we should have as many ships in commission as possible. Our circumstances differ totally from those of continental states, and what may be admirably adapted to their requirements may be wholly unsatisfactory for us.

The funds required for these measures and for the provision of a fleet which shall be able to blockade the enemy's ports must be attained somehow and by popular expedients. I can see no possible objection to a ten per cent. duty upon such manufactured goods as are not used in home industries. The value of these goods amounts by the *Statistical Abstract* for 1894 to some £60,000,000. Many of these are luxuries which can fairly bear an impost. Allowing for some shrinkage, such a tax would give us £5,000,000 annually, and the expenses of collection would be small. In addition, we might follow Mr. Goschen's own precedent and make a call upon the Sinking Fund. Our dependence upon the sea renders sacrifices for the navy an imperative necessity with which we can no longer trifle. A disputed command of the sea means to us national ruin.

H. W. Wilson.

TICONDEROGA.[1]

To a generation which is said to find Scott bombastic and Dickens dull it requires, perhaps, some hardihood to mention the name of Fenimore Cooper. But the young gentlemen who write in praise of each other in the newspapers form after all but a very small and not a very important part of the reading public; and if we may judge from the book-stalls, the author of "The Last of the Mohicans" still holds his own, together with many another whom these arbiters of taste would relegate to the dust and silence of the upper shelf. No doubt there are moments when it is not possible to take Cooper quite seriously; he was always writing, and always writing in a hurry. We all of us laugh at him sometimes, but yet love him all the more. Our children's grandchildren, we dare swear, will go on loving him without the laughter; for those little familiar pedantries of his will be by that time beyond the reach of criticism. They will have mellowed into the quaint mannerisms of a by-gone period. The dramatic movement, the stirring scenes, the picturesque Old-World figures will remain, when the power or the wish to question the accuracy of their painting will have passed away. And the historic value of his work, even if Englishmen are indifferent to it (which we do not think they are, and certainly they ought not to be), puts him on a pedestal alone so far as Americans are concerned, for he has made the most interesting and dramatic period of their history his own. Writers on both sides of the Atlantic are still taking the struggle with the French in America and the subsequent War of Independence as a background for their tales; but they are all of them too late to have such value as Cooper's books have. He was not, indeed, strictly speaking, contemporary with the period he chiefly wrote of, but he knew personally the generation who were, which is very much the next best thing. And, indeed, the America he lived in was practically the old America, politically independent, but in habits of thought and ways of life still more than half colonial. Slavery was a matter of course, and had as yet raised no question between North and South. In the North the cities had not yet eaten up the old provincial society, and the country gentleman living on his paternal acres was still an item in the Middle States. The railroad and the telegraph had not as yet linked

[1] Reprinted from *Macmillan's Magazine.*

States together and banished much of the mystery of the wilderness. People still traveled slowly and seldom, and politicians in Cooper's youth were mostly gentlemen who as often as not rode their own nags to Washington, attended by servants and pack-horses, and cherished a primitive regard for the welfare of their country. The novelist himself entered Yale as early as 1802, and after serving in the United States navy from 1805 to 1811, retired to a life of rural ease in his own province of New York. There for the rest of his life, with the exception of a few years spent in Europe, he lived among the scenes in which most of his books were laid. He must to a certainty have been in constant intercourse with the people who served through the Revolutionary War, and in his youth must have even known many who fought at Louisbourg, at Ticonderoga, or at Quebec.

Cooper's Indians are, from a realistic point of view, regarded usually as his weakest point, though from an artistic one they are probably his strongest. He was a little late, no doubt, for a personal acquaintance with the red man of the forests; but if he idealized him, what pleasure his ideals have given to countless readers! With his backwoodsmen the most captious critic cannot quarrel, but the backwoodsman survived long into Cooper's day; he had every opportunity of knowing him well, and made the most of it. Indeed, the genius may still be studied, though no longer, to be sure, in the Mohawk Valley, or by the banks of Lake George. For our own part, having been thrown much with him, we will say that some familiarity with the type of which Cooper wrote, has increased rather than diminished our affection for Natty Bumpo in all his various guises.

Most of us, no doubt, made our first acquaintance with Cooper at a tender age, when even a garden shrubbery contained something of the mysterious; and the familiar backgrounds against which the fancy of childhood pictured the Indian and the hunter still thrust themselves behind the pages of "The Deerslayer" or "The Pathfinder" as we read them now. For ourselves, indeed, we were fortunate at this remote period in having Savernake forest at our very door; and its glades, avenues, and thickets became so saturated in fancy with red-skins and scouts, that a something more than ordinary acquaintance with North American lakes and forests is still powerless to shift the whole scenery when Cooper's heroes come upon the stage. At the period of which we write the British school-boy was still, we fancy, thoroughly stanch in the notion that British soldiers were invincible except when greatly outnumbered, and that one Englishman was equal to three Frenchmen or even more. Yet there is a certain nook in that Wiltshire Arcady, to which we think we could still find our way, that for years was associated in our mind with an almost incredible disaster to British arms, with some monstrous dream of a great army full of pride and confidence, ignominiously routed and shattered by a lamentably infe-

rior force of Frenchmen. It was but a shadowy recollection for which one of Cooper's novels seemed to be responsible, and it was not till a much later period of life that an acquaintance with the tragedy of Ticonderoga explained the dim impression. For it is in one of his later and less known books that Cooper has treated of that bloody scene. A hundred people will be familiar with "The Last of the Mohicans" who possibly never even heard of "Satanstoe," a work that is valuable rather for the excellent picture it gives of colonial society than for the power of narrative which distinguishes so many of the others.

Who, indeed, remembers Ticonderoga except Americans and possibly a few Frenchmen? Parkman's glowing pages may here and there among Englishmen have shed some light upon these forgotten fights, though Warburton's statelier and more measured but still stirring eloquence is, we fear, as much out of mind as it is out of print. Yet Ticonderoga was probably the worst, and certainly the most ignominious defeat that England ever received from the hands of France; nor can it have slipped our memory because it was inexpensive, for we lost two thousand men in a single quarter of a summer's day. As many fell, indeed, upon that July afternoon as in the weeks and months of successful combat that have kept the memory of Louisbourg green and made the plains of Abraham famous throughout the world. And all this slaughter, for, judged by the scale of those wars it was immense, was inflicted by little more than three thousand Frenchmen; and sadder still to relate, some fourteen thousand Britons retreated from the stricken field at sunset, and retreated too in such fashion that panic is the only word to fitly express the nature of their discomfiture. With all this it might well be said that such a battle had better be forgotten. But there is another side to it, for, with seeming paradox, it may be urged that British soldiers have not often fought with more dogged valor, and that nearly every man of the two thousand who fell, fell facing the foe. Our poor soldiers had some strange leaders in the eighteenth century, and none stranger than the unfortunate gentleman who gave Montcalm such a victory on the shores of Lake George that even Frenchmen, who are not overmuch given to such concessions, were inclined in this instance to give God the greater glory. The very spirits of the dead who have now slept so long beside the shores of the romantic lake, would rise from their graves, one would almost think, at the name of Abercrombie. Braddock has been held up to sufficient execration, but Braddock's military errors were almost venial in comparison, and, moreover, he died fighting among his men like the stubborn bull-dog that he was. The bones of his victims on the Monongahela had been picked clean by buzzards and craunched by hungry wolves before Abercrombie appeared upon the scene to give another exhibition of what a British general of the Georgian age could do. And unhappily for him, he did not, like Braddock, die fighting, for he did not give himself the chance.

It was the summer, the momentous summer, of 1758 to which we would refer. America had grown very weary of Lord Loudon in chief command. He had not, it is true, sworn at the colonists like Braddock, but his sins had been so flagrantly those of omission that his troops, who were numerous, had lost heart, and the colonial wits compared him to the figure of St. George on a tavern sign, always galloping forward but never moving. Pitt's first act had been to recall him peremptorily and with scant courtesy. The rifle, the scalping-knife, and the torch had been busy upon the French and Indian side, from the Hampshire grants in the far North to the Ulster settlements in the valley of Virginia. Isolated forts, lonely block-houses, and palisadoed hamlets by the score had been swept away amid hideous scenes of flame and slaughter. The frontier had been driven back along the whole British line. The fringe of civilization had again become a wilderness, where at long intervals the buzzard and the crow kept grim watch from their tree-tops over the mutilated and festering corpses of a butchered peasantry. Nearly two million Anglo-Saxons were at this time actually on the defensive against less than a hundred thousand Frenchmen and the Indian allies that their successes had won for them.

Regiments of British soldiers and colonial militia had been marching up and down for a year or two and effected nothing. But Pitt was now in office, and a great effort was to be made to crush once and for all the formidable power of France in the Western World. Massachusetts alone had ten thousand men in the service of the king by land and sea, and had incurred the immense debt, for the period and for her capacities, of half a million sterling. Connecticut was scarcely behind her, while the province of New Hampshire had one in three of her male population in the field. Wolfe and Amherst were already thundering at the gates of Louisbourg; Grant was marching with a large force through Virginian forests to exact a tardy vengeance for Braddock at Du Quesne; and the greatest army that had yet been seen on American soil was mustering where the old Dutch frontier town of Albany looked down upon the Hudson. Some fifteen thousand men, nearly seven thousand of whom were regulars, with a formidable train of artillery, were there upon the frontiers of the northern wilderness through which ran the great route to Canada. There were the red-coated infantry of the line, veterans many of them from European fields, and kilted Highlanders with their wild music, led by their hereditary chieftains, and full of pride; for there was not a private among them, says Mrs. Grant, the wife of one of their officers, "who did not think himself above the rank of a common man." And there too were fast mustering the colonial militia, resplendent in new uniforms of blue faced with scarlet, and admirably armed. Every heart, not only in the camp itself, but throughout the northern colonies, beat high with confidence and regarded the French as in effect already crushed.

Abercrombie was in command, and nothing was known either for or against him; but Pitt had made things, as he thought, safe, by naming as his brigadier the brave and gifted Lord Howe, a young nobleman, called by Wolfe, who knew him, the best soldier in the British army. There is a tradition in America that the airs of superiority assumed towards the colonists by the British officers of these wars helped considerably to sow the seeds of revolution, and this, though perhaps there was intolerance on both sides, is readily conceivable. Lord Howe with all his rank, his military renown, and his personal accomplishments, was neither haughty nor supercilious, but made himself in a short time as much beloved by every class in the colonies as he was by his own soldiers. In social intercourse he won the hearts of the Americans by his modesty and good breeding; and he won their respect also by recognizing that, though virtually commander-in-chief, he had much to learn in forest warfare, and by setting himself at once to learn it. He not only accompanied on some of their preliminary expeditions one or other of the famous bodies of rangers who had made their names more terrible to Frenchmen than whole regiments of grenadiers; but he took measures to make his own light infantry more serviceable in the woods by stripping them of every useless ornament and impediment, even to cutting off their long hair and the skirts of their coats. He shared, too, every hardship with his men, washed his own linen at the brook, and ate his salt pork with a clasp knife. Albany was of course at such a time in a whirl of excitement, gayety, and hospitality. Madam Schuyler, a provincial fine lady, had a mansion in the neighborhood, and there is a pretty story that Lord Howe, who was her guest for a time, so won the heart of the old lady that she embraced him with tears when he rode off, as it so happened, to his death; and when a week or two later a horseman came galloping at full speed down the road, crying aloud as he passed that my lord was dead, this excellent lady, it is said, fell into a swoon, and the whole house resounded with wailing and lamentation.

By the end of June the army had moved on to the head of Lake George, and were encamped close to the blackened ruins of Fort William Henry. This post, after being forced by Montcalm to capitulate in the previous year, had been made the scene of that bloody massacre of the British by the Indians, which forms one of the most stirring chapters in "The Last of the Mohicans." The tables now seemed as if they were going to be turned with a vengeance. The shouts of victory were even then rising from the British battalions before Louisbourg, though Abercrombie's army could know nothing of this as yet, for news traveled through the woods in those days with painful slowness. Of this campaign on the lakes, however, no man doubted the issue. The natural water-way through mountains and forests to Canada seemed practically open to such a force. Montcalm was the

only obstacle of any kind, and he lay at the juncture of lakes George and Champlain, forty miles away, with but a paltry three thousand men of all arms. An immense fleet of boats and batteaux had been collected, and upon a sunny morning, the 5th of July, with leisurely confidence and in all the pomp and circumstances of war, Abercrombie's host floated out upon the beautiful lake whose clear and shining surface is happily commemorated in the Indian name of Horican, or the Silvery Waters. The pages of historian and novelist alike glow when they recall the splendor of this notable scene. The faded type of old New England journals, the yellow tattered letters written at the time, all testify to the glories of such a pageant as it was certainly in those days not often given to mortals to feast their eyes upon. Upward of twelve hundred boats, loaded with troops and munitions of war, stretched like a vast armada along the bosom of the lake. The summer morning was brilliant and cloudless. The sun had just risen over the mountain-tops, and chased away the mists that daybreak had found hanging along the swampy shores. Not a breath of air was stirring, not a ripple ruffling the silvery waters, nor over that immense sea of woodland which rose, wave upon wave, from the island-studded shores came breeze enough to move a blossom or a leaf. With regular precision, its wings stretched to right and left, and, as the narrow lake grew narrower, reaching almost from shore to shore, the splendid pageant swept northward. In the centre were the British regiments all gay in scarlet and white and gold; upon the right and left and in the rear went the colonial troops in soberer guise; from the whole line came the glint and flash of burnished arms, and above the boats at intervals hung the standards of famous regiments, while the brave show of a thousand tartans filled in the picture. Ten thousand oars with eager stroke caught the sunlight, and the bands of various regiments with their martial music woke the echoes of the silent leafy mountains which, as the lake narrowed, hung above them upon either side.

The Fifty-fifth, the Twenty-seventh, and the Forty-fourth Regiments of the line were there, and one battalion of the Royal Americans, then lately formed, but destined to win fame in all quarters of the globe as the Sixtieth Rifles. The Forty-sixth and the Eightieth were there also, and, conspicuous in their then strange and wild attire, the Forty-second Highlanders, or the Black-Watch. Twenty regiments from New England, New York, and the Jerseys were eager to show their over-sea compatriots that they were not wholly novices in the art of war. The gallant Bradstreet, prince of batteaux leaders, who in the following year was to win immortality by the grand dash which cut expiring Canada in two at Frontenac, was also there and entirely in his element. There, too, was Rogers, most redoubtable of woodland fighters, and his heroic band in moccasins and hunting shirts.

It might well, indeed, have seemed an invincible array as things were then. Philip Schuyler and Israel Putnam led companies of provincials, and many another man marched proudly beneath the flag of England that day who twenty years later was to turn his sword against his mother-country and his king. Pressing onward through the summer night, the flotilla had reached by daybreak the foot of the lake, whence issues the five or six miles of river which, impeded here and there by rapids, connect it with Lake Champlain. At the spot where this channel widens into the latter lake and forms an outstanding promontory rose the famous fortress of Ticonderoga. Here Montcalm, thanks to the jealousy or supineness of his government, stood at bay with considerably less than four thousand men. Behind him lay the three hundred miles of wilderness which shut him out from Canada and from succor. He had only a week's provisions, and retreat was impossible. There was nothing for it but to fight, and even to his brave heart it seemed as if such an unequal struggle could have but one issue. If Montcalm did not quite despair, it was because experience told him that one hope was yet left to him in British generalship. The connecting river in its course from the upper to the lower lake forms a right angle, flowing at first due north and then turning sharp to the eastward. Abercrombie had landed his army on the western shore of the waters and determined to march round to Ticonderoga upon that bank instead of crossing the river as was possible, and cutting off the angle it formed. At daybreak on the 6th the army entered the dense woodlands which clothed the rich strip between the hills and the river. The men marched in four columns, or rather forced their way as best they could through the tangled swamps. Lord Howe with his light infantry, and Rogers with his rangers, led the way. Montcalm's light troops had been pushed forward for purposes of observation; and a corps of these, some four hundred strong, hurrying back to Ticonderoga, missed their way in the dense forest, and by a pure accident came in contact with the head of Lord Howe's column. A fierce conflict, hand to hand and from tree to tree, ensued. Nearly all the French were killed or taken prisoners; but the success was dearly purchased by the loss of the gallant Howe, who fell dead at the first discharge with a bullet in his heart. Abercrombie seemed stunned by the fall of his lieutenant: it was as though the army no longer had a leader; and the troops lay all night in the damp woods to no purpose, to be with as little reason marched back again in the morning to the landing-place. Abercrombie now proposed to cross the river to the east bank and take a road through the woods which cut off the angle already alluded to. The bridge had been destroyed by the French; but the energetic Bradstreet constructed another in a few hours, and by the evening Abercrombie, leaving his artillery behind him, advanced his whole force to a point upon the river about two miles from

Ticonderoga, where another bridge and a saw-mill had just been burned and abandoned by the French. He had been told that Montcalm had six thousand men and was expecting further reinforcements, and it was this report, which he took no pains to verify, that accounted for his haste and the fatuous abandonment of the artillery so laboriously brought up from Albany.

In the mean time, Montcalm had not been idle. Levis and Bourlamaque were both with him, and a friendly difference of opinion between these three able soldiers as to the best fashion of facing such fearful odds had somewhat delayed their action. The fort itself was rejected as a defensive position, since it was open to artillery from various commanding elevations. At the last moment, on the morning of the 7th, it was decided to throw a breastwork across the peninsula several hundred yards in front of the fort which stood near the point. The centre of this peninsula was high, undulating ground, while the strip upon each side bordering on the water was a densely wooded swamp. The high ground facing landward, therefore, was the only point easily assailable by actual assault. There was a ridge, which with somewhat tortuous course stretched from swamp to swamp, and upon this Montcalm and his men, barely twenty-four hours before the English grenadiers came in sight, began to erect their breastworks. The famous battalions of La Sarre and Languedoc, with Rousillon of La Renie, Bearn, and Guienne were there, and with them were both colonial regulars, militia, and volunteers. Every man of them threw himself with untiring energy into the work, while even the officers, stripped to their shirts and ax in hand, toiled all day long in the blazing sun.

Abercrombie sent his engineers forward at dawn upon the 8th, and from the neighboring heights of Mount Defiance they saw a breastwork of logs seven or eight feet high, packed tight with earth and sand-bags, spanning the whole breadth of the peninsula. In front of the breastwork the ground trended gently downward, and the whole slope was covered with a bristling palisade of branches facing outward, their points sharpened. Beyond these formidable defenses the forest for about two hundred yards was laid flat as if by a hurricane, and the whole open space was a chaos of felled trees with their tops facing towards the foe. All this, if Montcalm had been opposed by a capable general, was work thrown away. There was more than one eminence from which the inside of his breastworks could have been raked by artillery; while a few miles higher up on Lake Champlain there was a point at which a moiety of Abercrombie's army could have completely cut off the retreat of the French, and left them to be pounded at will by artillery or starved out at leisure. But Abercrombie decided it was not worth while to bring up his guns, and, having left Montcalm due time to make his position impregnable, proceeded to assault it in the open with the bayonet. The officers attached to the expedition seem

to have been of the average class of that time, whose mission it was to get themselves killed with unquestioning cheerfulness. There do, indeed, appear to have been on this occasion some dissentient voices, but they were raised without effect. The colonists, many of whom knew the district well, no doubt wondered at the tactics of the British general; but every one's blood was up, and the massacres at Fort William Henry had left a burning desire for revenge. Nor had the soldiers as yet seen with their own eyes the nature of the task before them; Lord Howe was dead, and the brain of the army seems to have been paralyzed.

It was high noon, and a blazing sun poured its rays vertically down on the front ranks of the British army as they moved out of the forest into that maze of tangled branches through which they were to fight their way. The colonial rangers and light infantry, who had been pushed forward to drive in Montcalm's outposts, fell back on either flank as the long red lines of grenadiers with bayonets fixed, supported by the Highlanders nearly a thousand strong, stepped out into the sunshine. From a neighboring hill-top four hundred friendly Indians, whom Sir William Johnson (that queer backwoods baronet) had brought to share the approaching triumph, looked cynically down and shook their heads. It might be magnificent, but it was not war according to their notions, and they utterly refused to throw their lives away in any such midsummer madness.

It is a lamentable tale that remains to be told, and one of tragic monotony. Between the French breastworks and the leafy screen of the forest the distance to be traveled was perhaps two hundred yards. Forcing their way through a tangled chaos such as even Leather-stocking himself would have found no easy task, the front lines of the British infantry went on with orders to carry by steel alone those bristling barriers behind which three thousand leveled rifles lay secure. The works were eight feet high, and not a Frenchman was visible; but long before the grenadiers had reached the palisade of sharpened boughs that protected the main barrier of logs, a sheet of smoke and flame burst from the whole face of the latter, and a hail of bullets, mixed at various points with grape, swept through the advancing ranks. The hopelessness of the situation must have been apparent to any eye; but Abercrombie was two miles off at the saw-mill, and all that was left for his soldiers was to dare and to die. This indeed they did with splendid and piteous gallantry. The order to withhold their fire was soon treated by the troops with the contempt that in such circumstances it deserved; but this availed them little. Here and there the heads of the enemy, as they mounted the platforms to fire, showed above the rampart, and here and there an English bullet found its way between the logs. A battery of artillery would have knocked the rude defenses into splinters in an hour, but to rifle or bayonet they were impregnable,

and the artillery, as we know, had been left upon the lake shore. Regiment after regiment came bravely on, but each line was met, as it vainly strove to tear its way through the ragged branches, by such a hail of bullets and grape-shot as no troops could face and live.

As each shattered column fell sullenly back, leaving a fearful tribute of dead and wounded, fresh ones came rolling on like the waves of a sea, to break one after the other at the foot of that impenetrable barrier. Grenadiers, Highlanders, riflemen, vied with one another in the desperate valor with which they flung themselves on a position that the coolness and discipline of the veteran regiments behind it made more hopelessly impregnable. Thus for an hour or more went on the useless slaughter; and then a brief lull, born of sheer exhaustion, allowed the smoke to lift and gave Abercrombie a chance of changing his tactics. The swamps on either wing of Montcalm's position were not fortified. Their natural obstacles were indeed considerable, and they were occupied in force by Canadian riflemen; but they offered quite a feasible opening for attack compared to that deadly breastwork on which Abercrombie was so madly hurling his best troops. There was nothing to prevent him taking a week to consider his plans, for Montcalm was of course powerless as an assailant; but even now he did not think of his artillery, nor would he pause for a moment in his fatuous course. Fresh troops were ordered forward, and with them returned again and again to the charge the survivors of the first attack. Every time, however, they were met by the same steady and pitiless fire. Some, indeed, fought their way to the foot of the breastwork, when, finding it impossible to advance and refusing to retire, they were shot down at close quarters in the trenches. There is no space here to touch on the tales of individual daring that have survived from this bloody day. "The scene was frightful," says Parkman; "masses of infuriated men who could not go forward and would not go back, straining for an enemy they could not reach and firing at an enemy they could not see." "It was in vain at last," says Warburton, "as it was at first; and upon that rude barrier, which the simplest manœuvres would have avoided, or one hour of well plied artillery swept away, the flower of British chivalry was crushed and broken." Yet four hours of this insensate work had not daunted the spirit of these gallant men. At five o'clock the most determined onslaught of the whole day was made upon the French right. Then, and then only, was Montcalm for a brief moment in danger, and was forced to hurry in person with his reserves to where the Highlanders, by sheer contempt of death, were making their way up and over the parapet.

One more attack was made at six, but it was an expiring effort. Human endurance could do no more. What from heat, fatigue, and long hours of bloody repulse, the nerves of the troops were in that state which invites reaction. It matters little what started it; two

companies firing accidentally on one another, some say. At any rate, when the retreat was sounded, the very men who had braved death for five hours with such splendid heroism were seized, now danger no longer menaced them, with sudden panic. Some of the colonial troops remained upon the field, and from the shelter of the woods covered the parties that were still engaged in bringing off the wounded. The rest of the army, though no enemy was following or could follow, hastened in wild disorder along the forest tracks or through the swamps to the landing-place. Here Bradstreet and his corps, ever foremost in emergencies, averted a catastrophe, and resisted every attempt to seize the boats, which, with a panic-stricken army, would have been so fatal. The fugitives were still four times as numerous as the exhausted foe whom they imagined to be at their heels; and the stampede is the more remarkable from the sterling quality of the troops who took part in it, and the fact of such an intrepid spirit as they had shown being capable of a relapse so abject.

It only remained now to count the cost. Nearly two thousand men upon the British side had fallen, an immense loss when the scale of the battle is considered; and sixteen hundred and fifty of these were regulars. The French lost but a little over three hundred; and though they had fought all day behind cover and in comparative security, none the less did that brave handful of men deserve the chorus that rang to their praise throughout Canada and France.

Montcalm does ample justice to the long-sustained valor of his foe; and the Chevalier Johnstone, who was with him, bears still more impartial witness to the contempt of death shown by these gallant victims of stupidity. Abercrombie seems almost to have shared the panic of his men. Not contented with hurrying them back to the head of Lake George and to the spot whence they had set out a few days before in such pomp and splendor, he was not easy in his mind about his precious and unused artillery till he had actually deposited it safely within the walls of Albany. Hither soon after came Amherst, hastening from Louisbourg with his freshly-gathered laurels and three thousand men; but it was by that time too late in the season, and the end of all things American for the French was not to come yet. Poor Abercrombie here fades out of history. Tradition says that he and Wolfe returned to England in the same ship, a strangely assorted pair! Fortunately when the name of Abercrombie recurs to Englishmen, they think of Egypt and not of America, of a glorious victory and not of a lamentable defeat.

Another generation was yet to wake the echoes of these sublime solitudes with a strife as bitter and in a cause not less momentous. But all this seems now equally remote. The very majesty of the scenes themselves invite us even now to people them in fancy with the motley and picturesque battalions that for half a century more

or less made them their battle-field. The English traveler may even fancy that the strains which he now hears floating over the tops of the hemlocks and maples are the band of the old Royal Rousillon, till he awakes to the fact that it is music from the ball-room of a hotel; or he may imagine the craft that fleck the blue surface of the lake to be propelled by the sinewy arms of leather-frocked rangers or painted Iroquois, till some panting steamer with its huge paddle-wheel destroys the illusion and reminds him that they probably contain shopmen from Albany and school-mistresses from Boston. But the old gray walls of Fort Ticonderoga still moulder amid the throb of modern life, and beneath the feet of hurrying tourists or under the wheels even of screaming engines, or sometimes even yet, no doubt, amid the murmur of the old pines and hemlocks, still sleep the dead who fell here by thousands when the fate of America was yet hanging in the balance. How far they came and what a mixture of men were they whose bones now mingle with the dust of these historic shores: fresh-faced lads from Devon homesteads; sinewy Gaels from the yet savage Highlands; swarthy Frenchmen from the slopes of the Pyrenees; wild Canadians from the banks of the St. Lawrence; or fair-haired Germans fighting for all sides in turn. Here, too, lies the quaint colonial soldier of the three-cornered hat and coarse blue uniform, far enough from the Jersey village or Massachusetts church-yard, where still sleep his forebears, and his children, and his children's children. And there too, last but by no means least, reposes the dust of the most striking figure perhaps of all this motley by-gone throng, the fearless ranger of the wilderness, whom Cooper has made live forever in the person of Leather-stocking. With his fringed hunting-shirt, his moccasins, and long unerring rifle, but above all with his amazing nerve and iron frame, his valorous self-confidence and inexhaustible resource, he must ever, above all his contemporaries, hold our fancy.

NAVAL AND MILITARY NOTES.

SHIPS AND TORPEDO-BOATS.

AUSTRIA.

ARMORED CRUISER "D": DESCRIPTION.—This vessel, of the "Maria Theresia" type (very much modified), is under construction at the yard of the Stabilimento Tecnico Triestino, at San Rocco. The following details have been published:

Armament.—Two 9.45-inch Krupp guns, mounted singly in turrets (or barbette towers?) forward and aft, and worked by electric power. Eight 5.9-inch Krupp S. R. F. G. in a central armored redoubt, the two midship guns on each side in sponsons. Fourteen light R. F. G. variously placed. Four field and boat guns. Torpedo-tubes.

Protection.—Water-line belt of face-hardened or nickel-steel armor, 10.6 inches thick at the thickest part; armored citadel, 9.8 (?) inches; bulkheads, 7.9 inches; turrets (or barbette towers), 9.8 inches; protective deck, 1.42 inches.

Motive-Power.—Twin-screw, triple-expansion engines, of 12,000 I. H. P., designed to give a speed of 20 knots. Water-tube boilers. Bunker capacity very large.

Dimensions.—Length, 367.45 feet; beam, extreme, 56.1 feet; mean draught, 20.34 feet; displacement, 6004 tons (6100 metric tons).

DANUBE RIVER IMPROVEMENTS: RESULTS ON AUSTRIAN NAVAL PROGRAMME.—"Great progress has been made with the blasting operations at the Iron Gates on the Lower Danube, and it is confidently expected that by September the obstacles to navigation will be removed. This will be an immense advantage for commerce, but it necessarily preoccupies the naval and military authorities of the country. The river will be open to vessels of large tonnage as far as Vienna, and proposals are made that the existing Danube flotilla, which consists of the monitors 'Körös,' 'Leitha,' 'Maros,' and 'Szamos,' shall be strengthened, and that a number of torpedo-boats shall be added to it. Preliminary arrangements have been made for a dock at Buda-Pesth to accommodate these latter. The subject will be discussed at the next meeting of the Austro-Hungarian Delegations."—*Army and Navy Gazette.*

BRAZIL.

NEW PROTECTED CRUISERS.—It is rumored that the three protected cruisers of the projected Brazilian programme are to be built in Italy.

COLOMBIA.

"GENERAL NERINO": DESCRIPTION.—This side-wheel gunboat was recently completed at the yard of Mr. Hugh Ramsey, Perth Amboy, N. J., and was constructed in sections for ease of shipment. The hull is divided into ten water-tight compartments, and the single military mast is fitted to carry a search-light and rapid-fire gun. The total cost was about $125,000. The principal details are:

Armament.—Three R. F. G., one forward, one aft, one in the military top.

Protection.—Engines and boilers protected by quarter-inch nickel-steel plating (bullet-proof). Deck-house, to be occupied by riflemen, will have side plating of the same thickness, and sliding steel panels in lieu of windows. Bullet-proof conning-tower on the forecastle, just forward of the military mast.

Motive-Power.—Inclined triple-expansion engines; one Roberts water-tube boiler, designed to give about 430 I. H. P. with natural draft; speed, 15 knots.

Dimensions.—Length over all, 140 feet; beam at the water-line, 19 feet; beam over guards, 35 feet; depth of hold, 7 feet.

"CORDOVA": DESCRIPTION.—This armed transport was formerly the British merchant steamer "Neptuno," built at Sunderland, England, in 1891. She was recently refitted for her present work at Perth Amboy, and has now three decks and can carry 1000 men. The upper deck is flush, and there is a search-light on the single military mast. The armament consists of two 6-pounder R. F. G. and two Colt automatic machine guns. The guns have bullet-proof shields, and the wheel is similarly protected. The dimensions are: Length, 222 feet; beam, 27 feet; depth, 14 feet.

FRANCE.

After long delay the French naval estimates were passed by the Chambers, complete accord having been established between M. Lockroy, the Minister of Marine, and the budget committee. The total amount of the budget as passed, including 100,000 francs for dredging the channel of the Charente, is 266,057,362 francs ($51,349,070.87). The new construction authorized consists of the coast-defense armor-clad "Henri IV." (6500 to 7000 tons), armored cruiser "Jeanne d'Arc" (D_2—11,000 tons), torpedo-vessels "Dunois" and "La Hire" (900 tons), torpedo-boat "destroyer" of the "Havock" type, 30-knot

torpedo-boat ("Thénard") of the "Forban" type, and two smaller torpedo-boats. The last four will be built by contract.

"HENRI IV.": DESCRIPTION.—The exact character of this vessel is in doubt; but, according to French accounts, she will be a coast-defense ship of low freeboard, resembling in many respects the Americen monitor type; but the differences are very marked. There will be a single turret carrying a 30.5-centimetre (12-inch) gun. Ten 5.5-inch guns (six of them R. F. G. or S. R. F. G.) will also be mounted, as well as two large-calibre howitzers for high-angle fire, eight 3-pounder R. F. G., and two machine guns. The I. H. P. of the machinery is to be about 7000; speed, 15 knots. The dimensions are: Length, 278.8 feet; beam, 65.62 feet; displacement, 6889 tons. The estimated cost is $3,026,062, of which the sum of $80,167 is to be expended in 1896. The work of construction will not be commenced at the Cherbourg dock-yard until August; the vessel is to be completed by April, 1900.

"JEANNE D'ARC": DESCRIPTION.—This first-class armored cruiser is to be substituted for the proposed "D_2" of the original estimates, and is to be built at Toulon. All details are not yet settled, but the principal characteristics are:

Armament.—Two 7.48-inch guns, one forward, one aft; eight 5.5-inch S. R. F. G., probably in closed turrets; twelve 3.94-inch R. F. G.; sixteen 3-pounder R. F. G.; eight 1-pounder R. F. G.; two Maxim machine guns.

Protection.—Complete water-line belt, 5.9 inches thick, rising 2.3 feet above water, surmounted by a thinner belt of 3-inch plating. Protective deck, 2.16 inches thick. Total weight of armor about 2000 tons.

Motive-Power.—Triple-expansion engines of about 27,616 (28,000 meteric) I. H. P., designed to give a speed of 23 knots. Normand water-tube boilers. Estimated radius of action on total coal-supply, about 15,000 miles at 10 knots.

Dimensions.—Length, 469.2 feet; beam, about 63 feet; displacement, about 10,826 (11,000) metric tons.

The total estimated cost is $4,260,237.80, of which about $500,000 will be spent in 1896.

"DUNOIS," "LA HIRE": DESCRIPTION.—These two torpedo-vessels are to be built at Cherbourg dock-yard upon the design of M. Trogneux.

Armament.—Six 2.56-inch, and six 3-pounder R. F. G.

Protection.—Similar to that of the "D'Iberville" and "Cassini," hardened steel plating abreast machinery spaces, conning-tower, etc.

Motive-Power.—Twin-screw engines of about 6411 (6500 metric) I. H. P., designed to give a speed of 23 knots. Boilers, Normand water-tube.

Dimensions.—Length, 254.6 feet; beam, 27.5 feet; displacement, 886 (900 metric) tons.

The total estimated cost is $595,326.45. The complement is to be eight officers and one hundred and twenty men.

"GAULOIS": KEEL LAID.—The keel of the first-class battle-ship "Gaulois," 11,260 tons, was laid at Brest dock-yard, January 2, 1896, on the slip left vacant by the launch of the "Charlemagne."

"DU CHAYLA": LAUNCH, DESCRIPTION.—The launch of this protected cruiser, a sister ship to the "D'Assas," took place November 18, 1895, at Cherbourg dock-yard, where her keel was laid in March, 1894. The general design is almost exactly the same as that of the "Bugeaud" and her sisters, the "Chasseloup-Laubat" and "Friant." The hull is of steel and is not sheathed. The bow is of the projecting, swan-breasted type. The upper deck is flush without raised poop or forecastle. There are two ordinary pole masts fitted for signals. The principal particulars are:

Armament.—Six 164.7-millimetre (6.48-inch) S. R. F. G.; four 100-millimetre (3.94-inch) R. F. G.; ten 3-pounder R. F. G.; eleven 1-pounder R. F. G.; two torpedo-tubes. Two 164.7-millimetre guns are on the main-deck,—one forward, one aft,—with arcs of fire of about 135 degrees on each side, from bow and stern respectively; the other four are on the gun-deck in large sponsons widely separated (about one-third the length of the ship between them). The 100-millimetre guns are mounted on the main-deck, one each side forward and aft, underneath the ends of the bridges. Four of the 3-pounders are mounted on the top of the four large gun sponsons; the rest are on the gun-deck, bridges; etc. The torpedo-tubes are submerged, and of the "Drzewiecki" type.

Protection.—The protective deck is complete; 1.25 inches thick on the flat and 3.25 inches on the slopes over the boilers and engines. The usual gun-shields are fitted; it is believed that the sponsons of the 164.7-millimetre guns are additionally protected, but this is not certain.

Motive-Power.—Twin-screw, triple-expansion engines of 9100 I. H P., designed to give a speed of 19 knots; twenty d'Allest tubulous boilers. The coal-supply is 610 tons.

Dimensions.—Length on water-line, 325.62 feet; beam, 44.95 feet; mean draught, 19 feet; draught aft, 20.5 feet; displacement, 3804 metric tons.

"BRENNUS": TRIAL.—The first-class battle-ship "Brennus," 10,978 tons, after many abortive attempts, had a fairly satisfactory trial on January 9. The results for two hours under forced draft were: I. H. P., 14,000; speed, a little over 17 knots. There were some troubles experienced, but the trial, as compared with those which had preceded, was satisfactory. No further trials will probably be made.

The defects in the machinery, which are chiefly noticeable at high speed, can only be remedied by taking the engines down and setting them up afresh. As the ship can steam as fast under natural draft as any of the battle-ships in the Mediterranean Squadron (of which she is to form part) can under forced draft, it has been practically settled to defer such a heavy and expensive piece of work until some of the other new battle-ships are ready for sea.

"AQUILON": LAUNCH.—This first-class torpedo-boat, of 118 tons, was launched at the yard of Messrs. A. Normand & Co., Havre, December 10, 1895. The contract was executed July 12, 1893, but the construction was delayed by insufficient appropriations. A full description of the boat will be given when her trials take place, which will be in a few weeks.

"DUPUY DE LÔME": CHANGE IN BATTERY.—This armored cruiser is having her 164.7-millimetre guns replaced by other of semi-rapid-fire type. These latter pieces are of the model of 1887, L/45, but have been transformed to S. R. F. G. and the chase reinforced by addition to the jacket and by hoops. The muzzle velocity of the converted guns is 800 metres (2625 feet); charge, 28.8 pounds of *Poudre B*–19; the muzzle velocity of the unconverted guns is 700 metres (2296.5 feet); charge, 24.4 pounds.

GERMANY.

The German naval estimates for 1896–97 comprise the following items: For continuing work on the battle-ship (Ersatz) "Preussen," $714,000; for commencing a new battle-ship to replace the "Friedrich der Grosse," $238,000; last installment for machinery of the vessels of the "Sachsen" class, $390,320. For continuing work on the following cruisers: (Ersatz) "Leipsig," $297,500; (Ersatz) "Freya," *K* and *L*, $357,000 each. For commencing work on the second-class cruisers *M* and *N*, $416,500 each; on the third-class cruiser *G*, $119,000. For commencing a torpedo-division boat, $307,774; for other torpedo-boats, $428,400. If, as seems likely, this programme is accepted by the Reichstag, Germany will rise again to fifth place in naval power (counting vessels built and building), pushing the United States back to sixth.

"GEIER": TRIALS, DESCRIPTION.—This small unprotected cruiser has recently completed her trials. The average I. H. P. developed was 2910, and the mean speed 17 knots. She was launched at Wilhelmshaven, October 15, 1894, and is a sister ship to the "Cormoran," "Condor," and "Seeadler." Her rig is that of a bark, and the hull is of steel, sheathed with wood and coppered; complement, 159 officers and men. The principal details are as follows:

Armament.—Eight 105-millimetre (4.1-inch) R. F. G.; and four machine guns.

Motive-Power.—Twin-screw, triple-expansion engines of 2800 I.H.P., designed to give a speed of 16 knots.

Dimensions.—Length, 246.1 feet; beam, 33.46 feet; draught, 15.1 feet; displacement, 1640 tons.

GREAT BRITAIN.

The programme of new construction for 1896–97 has not yet been published, but tenders have been asked for the building of five new cruisers of the "Pelorus" type, five more are said to be contemplated, and there is talk of preparing to build a battle-ship at Devonport.

"ANDROMEDA," "VINDICTIVE," "GLADIATOR," "PROSERPINE": CONSTRUCTION COMMENCED.—Work on all these vessels has recently commenced: On the "Andromeda" (11,000 tons), at Pembroke, December 2; "Gladiator" (5750 tons), Portsmouth, January 27; "Vindictive" (5750 tons), Chatham, about January 4; "Proserpine" (2135 tons), Sheerness, about January 25.

THIRTY-KNOT TORPEDO-BOATS OF "HAVOCK" TYPE.—Twenty-four so-called "torpedo-boat destroyers," of 30-knots speed, have been ordered. The following table gives the names of the builders, the number of boats allotted to each, and the type of boilers to be fitted:

Builder.	No. of Boats.	Type of Boiler.
J. I. Thorneycroft & Co.	6	Thorneycroft.
Fairfield Co., Govan	2	"
Naval Construction and Armaments Company	2	"
Laird Brothers	4	Normand.
J. & G. Thomson	4	"
Palmer Shipbuilding Co.	6	Reed.

"DESPERATE," "FAME," "FOAM," "MALLARD," AND TWO OTHERS: DESCRIPTION.—These 30-knot torpedo-boat "destroyers" are building by Thorneycroft, and are in various stages of construction, the first four being nearly completed. The following description of the boats is from the *Engineering* (London):

"They are 208 feet long on the water-line, or 210 feet long over all. The maximum breadth is 19 feet 6 inches, and the depth 13 feet 6 inches. In general design the new boats follow the 'Daring,' the first destroyer built by Messrs. Thorneycroft, very closely, the chief alteration being the larger size of the more recent vessels, whilst to attain the higher speed bigger engines and boilers have been introduced. We gave a description of the 'Daring' at the time of her launch, and further details were published in our columns when the vessel was tried. It is not, therefore, necessary that we should go through the general features on the present occasion, and we will confine ourselves to the

points in which the 'Desperate' and her sisters depart from the original design.

"The additional 3 knots, in excess of the 27 knots before guaranteed, is to be obtained chiefly by putting in more power. The relative weight of hull has, however, been reduced where possible, the most important feature in this direction being the use of a new special steel which has been manufactured especially for these boats. It has a tensile strength of 38 to 43 tons per square inch, and the extension is fifteen per cent. on a 10-inch specimen. This may be compared to the 28 tons of the usual mild steel. It should be stated that the additional strength and stiffness—the latter being a very important feature—is not obtained by higher carbon, but by a new alloy, made especially for these vessels, in which strength and ductility are combined. In this way the scantling has been reduced without sacrifice of the strength of structure. In regard to the interior arrangements, the design of the 'Daring' has been followed. The boat's complement is fifty-six all told. The officers' quarters are right aft, whilst the crew are berthed, some right forward, and others just aft of the machinery space and next to the officers' quarters. It is certain that the officers have the most uncomfortable part of the vessel, getting all the vibration from the propellers. The forward part is undoubtedly the most comfortable, the turtle-back deck in the bow giving a chance to make a good lofty cabin. It would, however, be too grave a breach of British naval etiquette for blue-jackets to be aft and officers forward; the men might lose respect for their superiors and look on them as 'foremast jacks.' Nevertheless, in many foreign vessels of this type the officers' quarters are forward; and, so far as we are aware, this has led to no serious breach of discipline.

"The armament also is much the same as in the 'Daring,' but there are two more 6-pounder guns, or five in all, and only two torpedo-tubes in place of three, the 'Desperate' and her sisters having no bow discharge. Only six of these destroyers have the bow tubes, —namely, the 'Daring,' 'Decoy,' 'Havock,' 'Hornet,' 'Ferret,' and 'Lynx.' The general opinion of naval authorities appears to be in favor of reducing the torpedo equipment of these vessels in favor of the gun armament. It is said that destroyers should be destroyers, and not torpedo-boats. On the other hand, it is claimed by some that so long as the destroyers have the speed and gun-power requisite to give them certain victory over the torpedo-boat, there can be no harm in giving them powers of offense against larger vessels. The argument is a little dangerous, because one destroyer might find herself opposed by several torpedo-boats, and she would then want all the guns she could carry; moreover, an enterprising commander would be likely to have a keener desire to bag big game, and might be apt to forget his proper function of protecting the fleet by destroying the

little craft of the enemy. The question is, however, one for the naval officer to decide.

"Another new feature in the later destroyers is a commander's bridge or platform forward, just abaft the conning-tower. Here there is a steering wheel, and the larger size of these boats makes the position tenable even in bad weather. The advantages of handling a boat in the open rather than through a conning-tower will be apparent.

"The form of bow adopted by Messrs. Thorneycroft in the 'Desperate' is novel. The stem, in place of raking aft from the water line, slopes forward. The object is to make the boat drier when steaming at high speed. One of the chief troubles anticipated in action with these very fast boats is the heavy spray that is knocked up just at the point where the stem meets the water. This spray mounts up the sides of the bow and rushes aft in a torrent that would prevent the effective handling of the forward gun. Especially when steaming to the wind this is a very serious matter, and if there be anything more than a smart breeze, it is almost impossible to look out ahead. It is not a question of 'green water' coming on board and danger to the vessel; it is simply that the drops of water drive aft and cut like hail. In order to meet this, Messrs. Thorneycroft have modified the cut-water in the manner described. The point where the stem meets the water is several inches—perhaps two feet—aft of the extreme end of the deck. The water that runs up the side, owing to the sudden momentum it acquires by being struck by the boat, has, as it were, a more overhanging wall to climb instead of one more approximately vertical, and is, therefore, more likely to fall back than to get over the top. To increase this effect the designer has given the 'Desperate' more flare than usual, a feature which makes the vessel appear somewhat full forward. On the water level, however, the lines are extremely fine forward, and the stem itself is brought almost to a knife-edge. These features are, doubtless, introduced in order to overcome the spray-making effects of high speed. With a long vessel of this class the designer can afford to put in what sailors call 'a cowardly bow,' whereas it would not be admissible in a more beamy style of craft.

"The other end of the boat is also unusual, though no longer novel. It consists of what is known as the Thorneycroft stern. The bottom of the boat, right aft, in place of being of the usual ship form, slopes up to the water level, which it meets at the sternmost part. As the width is carried well to the end, this would give a flat floor, but with the Thorneycroft stern the floor is more than flat; it is absolutely arched upward. It has been usual to give a rounded corner where the floor joins the sides, but a small alteration has been made here, the bottom plating right aft being absolutely carried out level, and ending in a sharp edge. The result is what may be described as an arris,—to borrow a non-nautical term,—and an easier delivery is given to the

wake. The finish looks a little ragged, but there is no doubt it is an improvement, as there was a certain amount of eddying at the rounded corners, and although this might be inappreciable under ordinary circumstances, at the enormous speed these boats travel it is apparently worth considering.

"The machinery of the 'Desperate' and her sisters is similar to that of the 'Daring.' In the 'Daring' the engines, it will be remembered, were of novel design, and the same may be said of the water-tube boilers with which the latter vessel was fitted. Both engines and boilers have, we understand, been found to give excellent results in service, and fully bear out the promise of the trial trips. Perhaps the best proof of this lies in the fact that they are repeated in the new boats. A few unimportant changes have been made in the arrangement of machinery, but these do not call for any special notice. The proportions of both boilers and engines have been enlarged with the larger and speedier vessels now in construction, the grate and heating surface of the boilers being increased. The cylinders of the triple-compound engines are now twenty inches, twenty-nine inches, and two of thirty inches diameter, the stroke being eighteen inches. The boilers are three in number. The two forward boilers are placed back to back, and have a chimney in common, whilst the after boiler has one to itself. The forward chimney has naturally a larger cross-area than the other, but the chimney casings are made of the same size, so that in appearance both funnels are alike in size. The annular space between the after chimney and its casing is made to serve as an upcast shaft, by means of which the engine-room is ventilated. This arrangement has been found by experience to work very well in practice, a comparatively cool engine-room being thus secured,—no small advantage in the confined space full of high-pressure steam-pipes, etc., with which these boats are crowded."

"HUNTER": LAUNCH, DIMENSIONS.—This boat, of the "Havock" type, was launched at the yard of the Fairfield Ship-building Company, Govan, December 25, 1895. She is a sister to the "Hardy" and the "Hart," and is of the following dimensions: length, 194 feet; beam, 19.38 feet; mean draught, 5.6 feet; displacement about 225 tons. The boilers are of the Thorneycroft type, and the estimated I. H. P. of the machinery is 4600.

"HART": TRIAL.—After two abortive attempts, a successful three-hour, full-power trial was made on December 31 last, with the following results: steam in boilers, 196.1 pounds; air-pressure, 2.75 inches; I. H. P., 4143; speed, 27,075 knots; coal per I. H. P. per hour, 3.2 pounds. The draught at the commencement of the trial was 5.04 feet forward and 7.56 feet aft. The "Hart" is to be fitted with Holden's system of burning liquid fuel, and trials are to be made of the apparatus.

"ASTREA" CLASS: CHANGES.—While these vessels were building

a number of changes were made in hull and equipment, with the result of increasing the mean load draught by one foot. The sheathing, placed according to the original plans, is now found to be too low and is to be carried up a foot higher.

"AURORA": REARMED.—The rearming of the "Aurora" has been completed. The principal change is the replacing of her original 6-inch guns by ten 6-inch S. R. F. G.

"BLACK PRINCE": TO BE REARMED.—This old-type battle-ship of 9210 tons, a sister to the "Warrior," is to be rearmed with rapid-fire guns.

"DREADNAUGHT": REFIT, NEW BOILERS.—The low freeboard turret-ship "Dreadnaught" is to undergo refit and to have new boilers.

"RUPERT": DEFECTS IN HULL.—About three years ago the "Rupert" received extensive repairs and alterations costing nearly $600,000, and it was considered that she had been very successfully modernized and made into an effective ship. Recent examination, however, discloses the fact that her hull is in very bad condition, and she will need quite extensive repairs.

"SEAGULL": NICLAUSSE BOILERS TO BE FITTED.—The British Admiralty has decided to test the Niclausse water-tube boiler in competition with the Du Temple and Belleville; and for this purpose the torpedo-vessel "Seagull," 735 tons, of the "Sharp-shooter" class, is to be fitted with them.

GREECE.

"HYDRA," "PSARA," "SPETSIA": ADDITIONS TO BATTERY.—These third-class battle-ships, of 4885 tons, are to have a 3.9-inch and eight 2.56-inch R. F. G. added to the battery.

ITALY.

The Italian naval estimates for 1896–97 amount to 87,133,689 lire ($16,876,801.98), as opposed to $17,922,703.42, the amount allowed in the budget for 1895–96. The Italia Marineria credits the government with the purpose of building thirty heavily-armed cruisers of 23 knots speed. This plan is highly approved in naval circles, as the Italian navy is seriously deficient in cruisers, but there is little likelihood of the execution of the project on account of the great expense entailed. The government is even now hard pressed to obtain funds for carrying on the work already in hand. The necessity of finding money to pay for vessels building by contract has, at times, almost stopped work on the battle-ships building in the government yards.

TWO NEW CRUISERS TO BE BUILT: DIMENSIONS.—Two new cruisers are to be commenced in the government yards. The dimensions of the first are: length, 422.57 feet; beam, 66.37 feet; draught,

25.26 feet; displacement, 10,500 metric tons. The estimated horse-power, 23,000, is expected to give a speed of 23 knots. The second vessel is of 1100 tons only; length, 275.6 feet; beam, 25.9. The estimated I. H. P. of the machinery is 7000 and the expected speed at least 22 knots.

"SICILIA": TRIALS.—This battle-ship completed her official trials on September 19, 1895. The displacement at the commencement of the trial was 13,164 tons (designed mean load displacement, 13,090 tons). The duration of the natural draft trial was 6 hours and the results were: steam, 91; I. H. P., 15,288; I. H. P., maximum, 16,669; speed, mean, 19.2 knots; speed, maximum, 19.6 knots. The blowers were working but the fire-rooms were not closed. On the progressive trials, 85 revolutions, with about 15,000 I. H. P., gave a speed of 19 knots; while a sister ship, the "Re Umberto" (displacing about 450 tons more on trial), required 91 turns and 17,014 I. H. P. for the same speed. On her 6-hour trial, the "Re Umberto" only made 18.3 knots with 17,000 I. H. P. As a result of trials the pitch of the propellers of the "Re Umberto" was increased to that of the propellers of the "Sicilia." The machinery of the "Sicilia" was made by Messrs. G. Ansaldo & Co., of Sampierdarena, near Genoa, while that of the "Re Umberto" was built by Messrs. Maudslay, Sons & Field, of London.

TORPEDO-BOAT "HAVOCK" TYPE ORDERED.—A 28-knot torpedo-boat "destroyer" has been ordered to be built at the Odero Works, Sestri Ponente. It will have water-tube boilers fitted for burning liquid fuel.

TORPEDO-BOAT "NO. 19": LOST.—This third- (officially rated fourth-) class boat of about 13 tons was recently lost. Eleven of the crew, including one or more officers, were drowned.

JAPAN.

The Japanese naval estimates, as presented to the parliament, proposes the construction of the following vessels:

Four battle-ships of 15,000 tons and 17.5 knots speed; armament, four 12-inch guns, twelve 6-inch S. R. F. G., and thirty smaller pieces

Four first-class cruisers of 7500 tons and 21 knots speed; without vertical armor, but having a thick protective deck; armament, two 8-inch guns, ten 6-inch S. R. F. G., and twelve smaller pieces.

Three second-class protected cruisers of 4850 tons and 22.5 knots speed; armament, four 6-inch S. R. F. G., eight 4.7-inch R. F. G., and smaller pieces.

Two third-class protected cruisers of 3200 tons and 20 knots speed.

Three torpedo-vessels of 1100 tons and 21 knots, armed with two 4.7-inch and four 12-pounder R. F. G.

A torpedo-depot ship of 6750 tons and twenty knots speed, carrying six 12-ton torpedo-boats.

Eleven torpedo-boat "destroyers" of 254 tons and 30 knots.

Twenty-three first-class torpedo-boats of 120 tons and 24 knots.

Thirty-one second-class torpedo-boats of 84 tons and 22 knots.

Thirty-five second-class (called third) torpedo-boats of 54 tons and 21 knots.

"KOHEI": WRECKED.—This small cruiser, of 1030 tons, captured from China, and formerly called the "Kuang Ping," was wrecked on the Pescadores Islands, December 21, 1895. Sixty men and nearly all of her officers were reported missing.

NETHERLANDS.

The total amount of the naval estimates for 1896 is 15,758,026 florins ($6,334,726.45), the principal allotments being as follows:

Administrative purposes	387,282.50	florins.
Ship construction, repairs, etc.	6,500,115.00	"
Personal	5,036,945.50	"
Pilot service, hydrography, etc.	2,016,816.00	"
Half-pay, pensions, etc.	1,756,017.00	"
Unforeseen expenses	60,000.00	"
Total	15,758,026.00	"

In the budget statement the Minister of Marine calls attention to the fact that, with a few exceptions, the whole fleet is antiquated; furthermore, he says, that many of the hulls are much deteriorated and the boilers and engines worn out. The fighting value of these vessels is so small that he considers it wiser to spend money in replacing them in preference to patching them up any more. A complete reconstruction of the fleet is necessary and a commencement has been made with the larger ships. For general service and for the auxiliary squadron ten new ships, and for the home defense six new ships, are necessary. The three new cruisers at present building are to take the places of the "Van Galen," "Koning der Nederlanden," and "Johan Willem Friso," which are to be struck off the list of effective ships. The "Evertsen," "Kortenaer," and "Piet Hein" will, when completed, take the place of the "Buffel," "Guinea," and "Tijger," lately struck off the list. While the three new coast-defense ships proposed to be laid down will take the places of the "Schorpioen," "Stier," and "Panter." This renewing of the fleet will take place gradually, and arrangements are proposed to be made, so that three other new cruisers shall be completed by 1900. Three new coast-defense ships, by 1902, and another three by 1905. Some of the ships to be struck off the effective list will, by that time, have had over thirty-seven years' service. As three and a half millions (of florins) will be required yearly for new

construction, the ships kept in commission, both at home and abroad, will be reduced to as small a number as possible.

"PIET HEIN": TRIAL, DESCRIPTION.—This coast-defense vessel has recently completed her trials. A description of the vessels of this class was given in the NOTES for June, 1894, but the following is more complete in some particulars. The vessels of the class, "Piet Hein," "Evertsen," and "Kortenaer," are alike in all essential particulars They are lightly armored vessels, having moderate freeboard (about ten feet); flush main deck, with superstructure amidships extending about half the length and, in width, a little more than half the greatest beam; armored conning tower just forward of foremast; one smoke-pipe; two military masts, each carrying a fighting top; rounded ram bow; projecting stern. The other principal details are:

Armament.—Two 21-centimetre (8.27-inch) guns in a pear-shaped barbette tower forward of the superstructure, with arc of fire from directly ahead to broad off each quarter; one gun of the same calibre on the main deck abaft the superstructure, protected by a shield only. Two 5.9-inch S. R. F. G. on the main-deck in sponsons, one on each side, with arc of fire of 180 degrees. Six 2.95-inch R. F. G. on the superstructure, three each side, forward and after guns with fire ahead and astern respectively. Six 1-pounder R. F. G. in the tops and on the bridges, etc. Three torpedo-tubes.

Protection.—Complete water-line belt, 5.9 inches thick amidships, tapering to 3.9 inches at the bow and stern. Armor on barbette tower 9.45 inches; protective deck, 2.36 inches; shields over guns, 1.2 inches.

Motive-Power.—Twin-screw, vertical, triple-expansion engines, designed to develop 4800 I. H. P. and give a speed of 16 knots. There are four cylindrical boilers, working pressure 180 pounds, fitted with forced draught on the Howden system.

Dimensions.—Length between perpendiculars, 267.6 feet; over all, 282.75 feet; beam, extreme, 46.9 feet; draught, forward and aft, at normal displacement, 16.75 feet; depth 26.9 feet; displacement, normal, 3400 tons.

The mean I. H. P. developed during the four hours trial was 4736; revolutions, 149.45; speed slightly over 16 knots.

NORWAY.

COAST-DEFENSE VESSELS: CONTRACT AWARDED.—The Norwegian government has finally placed its order for the two coast-defense ships authorized by the last budget, with Sir W. Armstrong, Mitchell & Company, after some changes were made in the original tender. The price ($1,070,630) remains the same, but the turrets have been made somewhat stronger, and the engines more powerful. The principal

armament consists of two 8.27-inch guns, mounted singly in barbette towers surmounted by turret-shields or turrets. The vessels will carry in addition, four 4.7-inch R. F. G., protected by shields, and a number of smaller pieces.

RUSSIA.

It is reported that the Russian government is about to order the construction of two cruisers and two first-class torpedo-boats, but no particulars have been given out.

"SVIETLANA": KEEL LAID.—The keel of this protected cruiser of 3767 tons was laid at the Graville yard, Havre, early in December.

"KHERSON," "VORONESH": LAUNCHED.—These large steamers, building in England for the Volunteer Fleet, were both launched in the latter part of 1895.

SPAIN.

TWO TORPEDO-BOATS OF "HAVOCK" TYPE: ORDERED.—Messrs. J. & G. Thomson, of Clydebank, have received an order from the Spanish government for two 28-knot torpedo-boats of the "destroyer" type. To insure good sea-going qualities they will be somewhat larger than the vessels of the "Daring" class, and will have heavier scantlings. On trial the boats will carry a load of 75 tons, instead of 30, as required by the British practice.

SWEDEN.

The Swedish naval estimates for 1897, which have been presented to the Reiksdag, include provision for the first half of the grant of 11,800,000 crowns ($3,162,400) for the construction of two armored vessels, four torpedo-vessels, and six torpedo-boats, and a further sum of 3,000,000 crowns ($804,000) for the fortresses of Waxholm, Oscar Frederiksborg, and Gothland, as well as 2,000,000 crowns ($536,000) for victualling.

UNITED STATES.

"HELENA": LAUNCH.—This light draught, unprotected vessel, of 1392 tons, a sister ship to the "Wilmington," was launched at the yard of the Newport News Ship-building Company on January 30, 1896.

"TEXAS": TRIAL, DESCRIPTION.—The "Texas" was built at the Norfolk Navy-Yard from designs purchased in England. Her keel was laid in June, 1889, and she was launched June 28, 1892. She is a second-class battle-ship with flush main-deck and midship superstructure. Two military masts are fitted, each carrying two tops, the upper ones for search-lights. The hull is of steel without sheathing. The principal characteristics are as follows:

Armament.—Two 12-inch guns, mounted in turrets placed *en*

échelon, the port one forward. Six 6-inch guns, two each side on the gun-deck, and one on each end of the superstructure on the main-deck. Twelve 6-pounder R. F. G., six each side on the gun-deck, four forward, four aft, four amidships. The other guns are six 1-pounders, four 37-millimetre H. R. C., and two Gatlings. Four torpedo-tubes are fitted.

Protection.—The armor-belt is 12 inches thick at the water-line, reduced to 7 inches at the lower edge. It is of Harvey f. h. (face-hardened) nickel-steel, and extends 3 feet above and 4 feet below the water-line for a length of 118 feet, protecting the boiler and engine spaces. It is extended diagonally inward at the ends to protect against raking fire, the diagonal extensions being 17 feet in length and 8 inches in thickness. The protective deck is 2 inches thick on the flat and 3 inches on the slope. The thickness of the conning-tower is 9 inches. The armored redoubt extends diagonally across the ship, enclosing in the ends the bases of the turrets. The plating is of nickel-steel, 12 inches thick. The turrets are of 12-inch f. h. nickel-steel. The central tubes, carrying the hydraulic supply and exhaust pipes, are of 6-inch steel, as are also the two rectangular ammunition tubes. The redoubt contains the hoisting and loading gear, all operated by hydraulic power. There are two fixed loading positions for each turret.

Motive-Power.—Twin-screw, vertical, triple-expansion engines, designed to develop 8600 I. H. P. Four double-ended, cylindrical boilers, 18 feet long and 14 feet in diameter.

Dimensions.—Length between perpendiculars, 290 feet; on the water-line, 301.3 feet; beam, extreme, 64.1 feet; mean load draught, 22.5 feet; displacement, 6315 tons.

The trial took place on December 19, 1895, off New York. The mean speed developed during the trial was 17.8 knots; revolutions, 125.3; steam at engines, 141 pounds; air-pressure, 1.77 inches; I. H. P., 8610.1.

"INDIANA": GUNNERY TRIAL.—"The Navy Department has received the report of the recent target practice of the battle-ship "Indiana" during her cruise from Newport to Hampton Roads. The results were in every way satisfactory, the only drawback being a mishap to Ensign Joseph Strauss. Mr. Strauss was in the sighting hood of the forward 13-inch turret with his eyes close to the peep-hole, when the 8-inch gun, pointed at an angle of 50 degrees, was fired. His eyes suffered from the resulting blast. They are very much better now and Mr. Strauss is again on duty, although for a short time he suffered ill-effects from the accident. The practice was excellent, according to the reports received. Only two of the 13-inch guns were fired, the other two being incapacitated on account of defects in the rammers which have since been removed. Of the other guns, all were fired with

the exception of two 1-pounders. Captain Evans reported that everything connected with ordnance which had anything to do with the practice functioned well. The general effect of the firing on the electrical fittings, etc., was practically *nil*. But ten electric light lamps were broken. It was found that after a 13-inch gun was fired, the shock caused the turret to swing around a degree and a half. There was no recoil of the turret in the direction of its axis. The mounts took up the recoil satisfactorily. The exhaust valve, which permits the escape of steam in the hydraulic apparatus of the forward turret failed to function properly, and the exhaust valve in the aft 13-inch turret also failed to work satisfactorily. None of the reports received mentions the operation of the turret turning gear, or of the ammunition hoist, so it is presumed by the department officials that it performed good service. Experiments were made during the practice of the effect of the blast of the 8-inch guns on the 13-inch turrets and on the officers in the structure and the conning-towers. The surgeon of the ship, who was in the conning-tower, decribes the effect of the blast as approaching that of a gale of wind. Captain Evans stated that he fired the 8-inch guns at an angle of 5 degrees without damage, and that he would have fired them over the top of the 13-inch turrets had he not been afraid that the blast might injure the wooden pilot-house. Altogether he is very much gratified with the action of the 'Indiana's' battery and of its location. The practice has caused discussion as to the merits of the location of the 'Indiana's' battery, and of that proposed for the 'Kearsarge' and 'Kentucky.'—*Army and Navy Journal.*

"KATAHDIN": ACCEPTED, ETC.—"Engineer-in-Chief Melville has proposed to the Navy Department that he be permitted to lengthen the propeller shafts of the ram 'Katahdin.' By this means he believes that he can safely make the vessel reach a speed of 17-knots with a cost of only $5000 at the utmost. The department is considering the proposition. The President has signed the bill directing the Secretary of the Navy to accept the ram, and General Hyde, the president of the Bath Iron Works, is being heartily congratulated upon the acceptance of the ship."—*Army and Navy Journal.*

FISKE RANGE-INDICATORS.—"The Navy Department has decided to install in the new battle-ship 'Massachusetts' ten of Lieutenant Fiske's range-indicators for signaling to the various gun positions the distances determined by the range-finder. This installation is like that of the battle-ships 'Indiana,' 'Maine,' and 'Texas.'"—*Army and Navy Journal.*

HEAVY GUNS.

MAXIM SOLID-FORGED STEEL GUN.—Mr. Hiram S. Maxim has been experimenting with solid-forged steel guns, and claims to have perfected a process by which guns can be made from a single forging

that are superior to built-up guns. The forgings are made of steel which has sufficient carbon to take a spring temper. They are rough-bored and turned approximately to shape; then mounted in a furnace and, while rotating, heated to a dull red, and allowed to cool slowly in the furnace. This process of annealing removes all internal strains. The gun is then put in a lathe, turned down very nearly to the correct size outside, smooth-bored, and rifled. It is again mounted in the furnace in a vertical position, and, while rotating, a current of coal gas is allowed to pass through the bore, expelling all the air, while a small portion of the carbon in the gas is set free by the high temperature, and, in a nascent state, combines with the metal, thus raising the quality of the steel, making it considerably harder. When the gun is red hot, the gas is shut off, and a large stream of cold oil, under high pressure, forced through the bore while the gun is still revolving in the furnace. The result is the inside cools rapidly, the outside shrinking upon it, so that when the gun is taken from the furnace the metal surrounding the bore is in a state of compression while the outside metal is under tension. In the case of a 5.7-inch gun the inside was compressed .02 inch. The careful treatment the gun receives prevents it from bending, only one of the two guns made showing any deviation. The bore is then lapped out true and straight and the piece fired with increasing charges. A muzzle velocity of 2200 f. s. was obtained with a pressure of 15 tons, but proof charges are run up to a pressure of 22.5 tons. A singular effect of the firing was noticed; one of the guns was not changed in the least, but the other was found to be .002 inch smaller after firing, showing the outer metal to have been in a state of high tension.

Mr. Maxim's conclusions are rather sweeping: "I do not hesitate to say that these guns are the best that have ever been made, everything considered, and I do not hesitate to say that guns can be made on this plan which will be quite as reliable as they would be if made of innumerable pieces, one shrunk upon the other. This means that a gun can be made with half the weight of steel, half the time, and at half the expense as heretofore, and I do not see any reason why it should not be applied to the largest guns in the service."

Liebert Breech Mechanism.—Mr. O. F. Liebert, of Bethlehem, Pa., has recently patented a breech mechanism for heavy guns. The gear is all on the right side of the breech. The crank turns a very short horizontal shaft, supported by a journal secured to the breech face below and to the right of the bore. The other end of this shaft gears to a short vertical shaft (which also forms the lower collar-hinge) by beveled cogs, which in turn drive an almost equally short horizontal shaft by the same means. The journal of this third shaft is supported on the plug-collar or tray-frame. The left face of its beveled gear is also cut to fit a circumferential rack, projecting from the plug,

to effect the unlocking. On the left end of the third shaft there is a small pinion. When the plug is completely unlocked, the rear end of a longitudinal rack is brought up against this pinion. Further movement of the crank engages this pinion, which, traveling in the rack (which is extended to the front in a recess in the plug), draws the plug to the rear. When the pinion has reached the end of its travel the plug is completely withdrawn, and the collar, with the plug, turns to the right clear of the breech.

SIXTY-SEVEN-TON GUN ON THE "ANSON": DEFECTS.—Defects have developed to such an extent in one of the 67-ton guns of H. M. S. "Anson" that a new gun is to be supplied. A very large proportion of the 67-ton guns in the British service have proved defective, and it may have been partly due to an apprehension that good guns of this calibre could not be built in England that a maximum calibre of 12 inches was decided upon.

NEW JAPANESE GUN-FACTORY.—"There is a rumor that the Japanese government has entered into provisional arrangements with Lord Armstrong & Co., the great English firm of ship-builders and gun-makers, for the establishment of a dock-yard and gun-factory in Japan. The proposed terms are that twenty per cent. of the labor should come from England, eighty per cent. be furnished by Japan, the Japanese government contributing an annual subsidy, and reserving the right to purchase the works at the end of a certain number of years, by which time the necessary skill will have been acquired. If this scheme be consummated Japan will soon be building all her own ships of war and manufacturing her own armament."—*Army and Navy Journal.*

RAPID-FIRE, MACHINE, AND FIELD GUNS.

CANET TWIN GUN-MOUNT.—M. Canet has recently patented a twin-mount for R. F. G. The carriage, or cradle, is double, and arranged like the barrels of a field-glass, but proportionately very much closer, there being only sufficient interval between the breeches for the rather thin diaphragm connecting the upper and lower parts of the cradle. Whether the guns are loaded and the breeches opened, simultaneously, is not stated, but presumably they are.

COLT (BROWNING'S PATENT) AUTOMATIC MACHINE GUN.—The Navy Department has ordered fifty of these guns, but has not yet adopted the weapon to the exclusion of other machine guns. The piece is of the recoiling piston type, has a single barrel, and is very light, weighing with a strong tripod mount only 40 pounds. The casing, containing the mechanism, is below the barrel and extends about five-sixths the length. The operating piston lies parallel to the axis of the bore, and is actuated by powder-gas escaping from the bore

through an orifice a short distance from the muzzle, after the projectile has attained its maximum velocity. The rearward movement of the piston opens the breech, cocking the hammer, ejecting the empty shell, and feeding to the carrier another cartridge. The piston is returned to the front by a spring, forcing home the cartridge and closing and locking the breech. The rear end of the barrel terminates in a piston grip and a trigger of usual form. Pulling the trigger releases the firing pin and fires the cartridge. The firing continues automatically as long as the trigger is held back. The cartridges are fed on a belt, the belts being packed in boxes holding 100, 250, and 500 rounds. A safety lock is provided which securely locks the hammer and prevents it from striking the firing-pin. It is to be used only when a cartridge is left in the gun. The hammer is used, also, as the piston of an air-pump and forces a strong jet of air into the chamber and through the barrel, removing all residue or unburnt powder after the shell is extracted. The main-spring, firing-pin, and extractor can be replaced as easily and as quickly as in the ordinary bolt gun, all of these parts being removable from the rear of the arm without displacing a single screw.

SMALL-ARMS.

New Russian Service Revolver.—This is a gas-tight revolver, patented by M. Nagant, of Liége. The cartridge-case extends slightly beyond the point of the bullet and projects a short distance beyond the front end of the cylinder. The revolution of the cylinder is effected, as usual, in the operation of cocking; but, as the cartridge comes in line with the chamber, the cylinder is pushed forward by a wedge and the tip of the shell enters the barrel, thus bridging over the break in the arm. The original Nagant revolver had several defects,—easily broken point of hammer, complicated parts, etc.,—but in the modified weapon adopted by Russia the defects are said to have been rectified. The calibre of the new revolver is the same as that of the service rifle, 0.3 inch. The nose of the bullet is flattened to promote a mushroom effect. The charge of smokeless powder is 0.8 gramme (12.34 grains); bullet, 12.5 grammes (192.87 grains); muzzle velocity, 275 metres (902 feet). The weight of the arm is 780 grammes (1.74 pounds). The penetration of the bullet remains considerable up to about 300 yards; at 27 yards it passed through three pine boards about an inch thick, separated from each other; and at 150 yards through an inch board. The retail price of the revolver in Russia is about $11.50.

Rifles for Norway.—The Norwegian government has placed a contract for 20,000 Krag-Jorgensen rifles with the Austrian Small-Arms Works, at Steyr, Austria.

RIFLES FOR THE NATIONAL GUARD OF THE STATE OF NEW YORK.—"The New York State Board of Examiners to select improved arms for the National Guard of the State, which recently extended the time during which sample magazine rifles could be received for test until March 2, 1896, has issued an interesting circular for prospective competitors, stating that the rifle upon which bids are required is to have the following general characteristics: Calibre, 0.30 inch; length of barrel, 28 inches; rifling, six grooves, one turn in 9 inches; bullet, metal-jacketed, 220 grains weight; cartridge, brass, maximum capacity 36 grains of smokeless powder; charge, maximum, 36 grains. The rifle to be accepted must use the present standard service smokeless powder ammunition of the United States government; the arm must stand a chamber pressure of 60,000 pounds per square inch; and the barrels are to be manufactured from the best quality of steel. The maximum limit of weight of the arm is fixed at 10 pounds, the minimum limit at 8½ pounds. Fittings necessary to the efficiency of the arm, including sights and bayonet, will be considered as included in the price bid for the manufacture. The rifles submitted must be of American invention and manufacture, and each rifle must be accompanied by a written agreement to manufacture such arms in the United States, not exceeding 15,000, as may be required by the State." —*Army and Navy Journal.*

RIFLES FOR THE CANADIAN MILITIA.—"The Canadian government has practically decided to purchase 40,000 stand of Martini-Enfield rifles with which to arm the local militia. The *Times* (London) correspondent telegraphs from Ottawa: 'The authorities here consider the mechanism of the magazine rifle too delicate for the weapon to be placed in the hands of raw troops. It is therefore proposed to confine its use to the permanent force, which is already armed with it. The new weapon chosen will have the Martini action with the Enfield three-grooved barrel, and will carry a .303 bullet, the same as the Lee-Metford. Hence only one class of ammunition will be required in Canada, whether for the imperial forces, the Canadian regulars, or the militia. The authorities here greatly appreciate the assistance which the imperial government is rendering them in the selection of their new weapon.'"

GUNPOWDER AND EXPLOSIVES.

TEST OF UNITED STATES NAVY SMOKELESS POWDER IN A 13-INCH GUN.—"Two rounds of experimental smokeless powder for the 13-inch guns were fired at Indian Head to-day (February 8). In each a charge of 315 pounds of the explosive was used. From the first round a velocity of 2295 feet per second was obtained, with a pressure of fourteen and a half tons. In the second the velocity was 2240 feet per second, with

fourteen and a quarter tons pressure. Other firings of this powder and additional tests will be made in the near future. It is said that there was practically no smoke to-day."—*New York Herald.*

MISCELLANEOUS MILITARY NOTES.

BRITISH ARMY.—"Excluding the Indian native army and the forces raised by the colonies and her reserve, England has 221,000 officers and men actually serving. This allows about 1300 to the three regiments of Household Cavalry; 18,500 to the 28 regiments of Dragoon Guards, Dragoons, Hussars, and Lancers; more than 37,000 to 21 horse batteries, 87 field batteries, 10 mountain batteries, 93 garrison companies, and the depots and riding establishments of artillery; 7700 to the various companies of Engineers; 6000 to the seven battalions of Foot Guards; 137,500 to 141 battalions of line infantry, Highlanders, and Rifles; 5000 to various colonial corps raised as part of the imperial forces; 3500 to the Army Service Corps; 2500 to the Medical Staff. Corps, and the remainder to the Ordnance Store and Army Pay Corps, There are on home service about 107,000 men; 27,000 in Ireland, nearly 4000 in Scotland, and the rest in England, Wales, and the Channel Islands; 76,000 in India, Burma, and Aden; nearly 15,000 in the garrisons of Malta and Gibraltar; 3500 at the Cape and Natal; 3000 at Hong-Kong; 4500 in Egypt; and the residue are scattered over the West Indies, Bermuda, Nova Scotia, Mauritius, Ceylon, the Straits Settlements, and other places. Canada has 1400 of the Queen's forces, Australia none, and the recent dispatch of men to the African West Coast has only added about 1000 soldiers to the ordinary strength in that part of the empire. India has 9 regiments of cavalry, 88 batteries and companies of artillery, and 53 battalions of infantry. The largest force is in the Bengal command, some 24,000; the new command of the Punjab comes next with 20,000, and of the two other commands Bombay has about 1000 more men than Madras, the latter including Burma."—*Army and Navy Journal.*

GERMAN ARMY.—The effective list of the German army for 1896–97, according to the *projet de budget*, is as follows: Officers, 22,687; non-commissioned officers, 78,054; privates, 479,229; surgeons, 2090; paymasters, 1100; inspector of military music, 1; director of balloon workshops, 1; veterinaries, 578; armorers, 1061; saddlers, 93; horses 97,378. The fighting force is divided among the principal states of the empire as follows:

	Prussia.	Saxony.	Würtemberg.	Bavaria.
Officers	17,715	1,503	912	2,557
Non-commissioned officers . .	60,489	5,461	3,264	8,840
Privates	371,278	33,960	19,745	54,246

HAWAIIAN ARMY.—The *Hawaiian Star*, of November 20, says, "Judges declare that Thursday's parade of the First Regiment was decidedly the best military display ever made by Hawaiian troops. Besides staff, field, and line officers 512 men were in the parade. In the First Battalion were Companies A, B, C, and E, and a fifth company of artillery. B turned out four platoons and was divided into two companies, under Captain White and Lieutenant Jacobsen respectively. In the Second Battalion were Companies F, G, H, and D, a fifth company of artillery, and a sixth of flying artillery. Carter's mounted reserve and Cook's mounted patrol brought up the rear of the parade. The artillery in the Second was in charge of Lieutenant Ludwig, Company F. Colonel McLean's reorganization of the uniformed force may now be recorded as an unqualified success. Interest in the National Guard has very much increased, and it has grown rapidly in numbers and efficiency."

NETHERLAND'S COLONIAL ARMY.—The Netherland's colonial army is made up as follows:

	Officers.	Troops.
Netherlanders	950	10,997
Netherlanders (colonial born, but educated at the home military school)	379	. . .
Foreigners (various)	31	608
Natives of colonies	. .	1,618
Belgians	. .	1,300
Germans	. .	1,500
Total	1360	16,023

ITALIAN ARMY.—The total amount of the Italian military estimates for 1896–97 is 234,754,760 lire ($45,307,670.42), a diminution of 1,300,000 lire from that of 1895–96, besides a saving of 730,000 in various directions. The effective lists of the army in 1895–96 and 1896–97 are compared below.

	1896-97.	1895-96.
Officers	18,039	18,557
Employés	3,198	3,455
Troops	194,049	205,117
Horses of officers	9,611	10,620
Horses of troops	36,206	36,427

VENEZUELAN ARMY.—"Venezuela has a regular army which, in 1893, consisted of 7280 officers and men, while 250,000 citizens are, according to law, liable for military services."—*Army and Navy Journal.*

L. S. VAN DUZER,
Lieutenant U.S.N.

SERVICE SALAD.

Montenuovo.

NAPOLEON II.'S BROTHER.

EVERYBODY who has either been to see Sardou's great play of "Madame Sans-Gêne," or who has read the book bearing that title, will recall to mind the Count de Neipperg, the Austrian chamberlain of the Empress Marie Louise of France, who plays the *rôle* of the lover in the drama. The Prince William Montenuovo, who has just died at the famous lunatic asylum of Doebling, near Vienna, where he had been confined for seventeen years, was no other than the son of the empress and of this Count de Neipperg, a fact which it is difficult to realize, so far back in history do the incidents appear which are vividly portrayed in the play of "Madame Sans-Gêne." According to the Almanach de Gotha, Prince Montenuovo was born at Parma just two months after the death at St. Helena of Marie Louise's husband, Napoleon I.,—that is to say, before even the news of his demise could have reached Europe, and thus enable the empress to contract a morganatic union with the Count de Neipperg. But the Almanach de Gotha, like several of the English peerages, is more considerate and courteous than strictly correct, especially where the fair sex is concerned, and it is no secret at the court of Vienna that the appearance in the world of the prince who has just died took place a couple of months prior to the termination of the eventful existence of the great Napoleon. Indeed, it was in consequence of these circumstances in connection with the date of his birth that the Neipperg family, one of the most ancient of the mediatized houses of the German empire, absolutely refused to permit the child to bear their time-honored patronymic, which they hold equal in antiquity and purity of descent to that of the Hapsburgs. They even went so far as bluntly to intimate to old Emperor Francis that he would do well himself to provide a name for his daughter's illegitimate child, instead of attempting to foist it upon their family. The emperor, who, notwithstanding his sheep-like face and unintellectual appearance, was by no means a fool, adopted their suggestion without comment, and with a certain grim and sardonic humor invested his illegitimate grandson with the name and title of Count of Montenuovo, which is nothing more nor less than the Italian translation of the word Neipperg. He, moreover, settled large estates upon the boy, and when the latter grew up heaped all kinds of honors and dignities upon him.

William of Montenuovo proved himself fully worthy of the favor of his imperial grandfather, to whom he was infinitely more attached than to his mother, the latter having had as little of the maternal instinct as of the moral. Indeed, he was seldom at Parma, especially when, after the death of his father, Count Adam de Neipperg, in 1829, his mother married another of her chamberlains, Count Bombelles, whose son, by the bye, accompanied Emperor Maximilian to Mexico, and subsequently acted as Master of the Household to the ill-fated Crown Prince Rudolph. Young Montenuovo entered the army at an early age, and greatly distinguished himself in the

wars of 1849 and 1859, narrowly escaping being taken prisoner at the battle of Solferino by those very French over whom his mother had reigned for eight years. Remarkably accomplished, with most winning manners, and of tall and handsome presence, he had inherited all the comeliness of his mother, in whom the peculiar Hapsburg traits, though marked, were softened into actual beauty. His hands, too, although he was a superb swordsman and rider, were as long, as soft, and as shapely as those for which the empress was so famous, and, indeed, he showed no trace of resemblance whatsoever to his father, who enjoyed the well-merited reputation during his lifetime of being the most hideous old man in Austria. One-eyed, broken-nosed, completely bald, and bow-legged, besides being exceedingly brusque and disagreeable in character, Count de Neipperg seemed to Emperor Francis to be just the man, of all others, most suited to act as chief of the household, and principal mentor and adviser to his fickle and flighty daughter, the Empress Marie Louise. There could be no danger, he felt sure, of her ever falling in love with such a monster of ugliness. But in this he was mistaken, and as long as he lived he had before him his young grandson, Montenuovo, to remind him that emperors, no matter how "apostolic" their "majesty," are no more infallible than other mortals in their judgment of the feminine character.

Already wealthy in his own right through the favor of Emperor Francis, Count Montenuovo still further increased his riches by marrying Countess Julia Batthyani, heiress to her father's immense estates in Hungary, and so popular did he become, alike at Vienna and at Budapest, that the present emperor, Francis Joseph, followed the example of his uncle and still further honored this young cousin by raising him to the dignity of prince, by conferring upon him the Order of the Golden Fleece and the rank of general of cavalry, besides investing him with the proprietorship of a crack dragoon regiment, just as if he had been a full-fledged member of the imperial house, instead of merely one of its side lights.

About seventeen years ago the prince became insane, his lunacy taking the form of a species of mania on the subject of music. His rooms in the great lunatic asylum at Doebling, furnished with the utmost comfort and luxury, were crowded with all kinds of musical instruments and music-boxes, and every week throughout the entire term of his confinement leading *virtuosi* were summoned, of course at considerable expense, to play and sing for his entertainment. That he should have thus died in a species of captivity is all the more remarkable when it is recalled that his half-brother, Napoleon II., in whose favor the great Napoleon abdicated at Fontainebleau, and whose memory is preserved in so many beautiful paintings as the "King of Rome," died likewise in gilded confinement at the Palace of Schoenbrun, where he was, to all intents and purposes, a state prisoner, after both his health and his mind had given way to the melancholia consequent upon his captivity.

The late Prince Montenuovo leaves yet another half-brother, the son of Count Adam de Neipperg by his first wife, Therese, Countess of Pola. He is an old man, having been born at Paris in 1812, at the time when his father was in attendance upon the Empress Marie Louise. Invariably dressed in uniform,—for he has been in his day one of the foremost cavalry generals of the Austrian empire,—he is a familiar and popular figure of Viennese life, and I hear that when Sardou's "Madame Sans-Gêne" was performed for the first time in the imperial capital, nearly every eye in the house furtively sought, not the stage, but a well-known corner in the orchestra stalls, where sat the white-haired and moustached field-marshal, watching through his opera-glasses the theatrical counterpart of his father, the title of whose *rôle* had, however, from a sense of propriety, been changed from that of Neipperg to Werther.

The late Prince Montenuovo leaves a son and two daughters. The former, Alfred by name, is at present president of the Jockey Club, and once spent six months traveling in this country with his friend, Prince Henry Liechtenstein, being extensively entertained by Mr.

Havemeyer, Austrian consul-general at the port of New York. He is one of the best-known sportsmen in Europe, and certainly one of the most handsome of men, while of late years his name has often been on the lips of sporting men in the Old World as one of the leaders in the attempt which has been made to purify the Austrian and Hungarian turf from those scandals by which it has so often been disgraced. Not only does he own a racing stable himself, but his wife, a Countess Kinsky by birth, likewise possesses an independent stud of her own, and not infrequently the colors of the wife are to be seen matched against those of the husband. Indeed, the princess's stable is even more famous than that of the prince, and on one occasion a horse belonging to her won the blue ribbon of the Austrian turf, the Vienna Derby. One of his sisters, Princess Albertine, is married to that Polish Count Wielopolski who alone among his countrymen managed to enjoy the most unbounded confidence, esteem, and affection of Czars Alexander II. and III. without forfeiting his good name as one of the truest and most patriotic sons of Poland. A grand seigneur in every sense of the word, highly accomplished and even erudite, the late emperor in particular used to insist on having him by his side throughout his annual stays at Spala, his hunting château in Poland, and he even intrusted to the count the management of his estates in that province of the empire, all this without ever in any way affecting the count's popularity among his countrymen. The other of the late prince's daughters is married to one of the Hungarian Counts Apponyi.

Prince Albert Montenuovo at the present moment is without doubt the most influential and conspicuous figure in Austrian and Hungarian society, and it is certainly an irony of fate that whereas the father at his birth was considered unworthy to bear even the name of one of the noble families, the son should have now become the acknowledged leader of the most exclusive society and the proudest aristocracy in the world.

EX-ATTACHÉ.

Days of Battle in Hagerstown.

AN EYE-WITNESS'S ACCOUNT OF THE PURSUIT OF LEE IN '63—CUSTER'S CHARGE ON STUART.

The Scene witnessed from the Top of a Hotel and a Terribly Grand Sight obtained of the Mêlée in the Streets—General Custer's Appearance in the Battle.

I WAS in Hagerstown when the battle of Gettysburg was being fought, and we could distinctly hear the connonading and knew that a decisive battle was going on. The town was then practically isolated from the rest of the world.

On Saturday, July 4, 1863, General Lee began his preparations for the retreat, and on Monday evening, the 6th, the retreating columns had proceeded as far as the west side of the South Mountain, near Smithburg. That evening, John Zettle and I took a walk out Potomac Street beyond the Reformed Church. Suddenly we heard reports of cannon, and looking over to the South Mountain, just beyond Smithburg, we could see the battle going on between Stuart's cavalry and that of Custer and Kilpatrick. We could distinctly see the flashes from the cannon as they fought until long after nightfall. Stuart was defeated and lost the train he was guarding, consisting of between three and four hundred wagons, which Custer and Kilpatrick captured, and took down along the mountain road to Boonsboro', and sent them across the mountain to Frederick city.

At about 9 o'clock the following morning I was standing in front of the Eagle Hotel, on the corner of the centre square when the advance of Lee's retreating army arrived. This consisted of ambulances filled with wounded men, sutler's teams, and straggling horsemen on their way to Williamsport and Falling Waters, on the Potomac River. It was then that I saw the first Confederate infantryman who entered the city on the retreat. He was a tall, rough-looking fellow and about as ugly a man as I ever saw.

We engaged in conversation, and I learned that he had been struck with a spent ball, which entered below the eye at the right cheek-bone and lodged underneath the right lower jaw, which was

terribly swollen and added to his ill-looks. I asked him, "Which way are you going?"

He answered, "Across the river."

I said, "What is wrong?"

He replied, "We are on the retreat. We got whopped like h— up there at a little town called Gettysburg."

This was very good news to the loyal citizens of the city.

This same morning, July 7, Stuart attacked Custer and Kilpatrick at Boonsboro', in which engagement Stuart was again defeated, and driven that forenoon fourteen miles up the pike to the suburbs of the city.

Just before mid-day we learned of the battle going on, and I, in company with a few others, walked to the southeast end of the city, to Andrew Hager's farm. Here we found the advance of Stuart's retreating columns, which occupied Hager's barn and barn-yard for hospital purposes. The surgeons were busy amputating limbs and extracting bullets from the wounded, and administering such other aid as possible. I remained there about a half-hour, and then returned to the hotel. Shortly after my return the retreating columns came thronging into the city. General Stuart massed his troops in the streets and alleys to resist the victorious columns of Custer and Kilpatrick.

George Sands, Colonel Cramer, both of Hagerstown, and myself ascended to the top of the Eagle Hotel to view the battle. The sight which we beheld was indeed terrible, yet grand. The Federal artillery was stationed on the pike near the Seminary building, on the Boonsboro' road, and Stuart's artillery near the Reformed Church, at the north end of the city, on the Leitersburg and Waynesboro' road.

The artillery duel over the eastern end of the city lasted only about a quarter of an hour, yet it shook the city to its very foundation, and terrified its inhabitants. We could see the flying shells, which appeared like pigeons sailing in the air, reflecting the golden sunlight as they whirled and twisted in their angry flight, some bursting high up in the air, while others fell near their mark.

When the artillery ceased firing the final charge was made. This was more than terrible, the discharge of pistols and carbines, the cheers and yells of the men, and the flashes of the bright sabres as they glittered in the sunlight being a wonderful sight to behold from a position such as we occupied. One of Hagerstown's artists, John Stemple, who had ascended to the top of Mr. Stroub's house, on the corner of the square and almost directly opposite to us, for the purpose of viewing the battle in order to make a painting of it, was shot through the head by a sharpshooter.

Captain Snyder, of the First Michigan, and Captain Pennebroker, of the Eighteenth Pennsylvania Cavalry, with their companies, led the charge into the city, and both were wounded in the centre square. The cutting and slashing was beyond description; here right before and underneath us the deadly conflict was waged in a hand-to-hand combat, with the steel blades circling, waving, parrying, thrusting, and cutting, some reflecting the bright sunlight, others crimsoned with human gore; while the discharge of pistols and carbines was terrific, and the smoke through which we now gazed down through and on the scene below, the screams and yells of the wounded and dying, mingled with cheers and commands, the crashing together of the horses, and the fiery flashes of the small-arms, presented a scene such as words cannot fully portray. The contending forces were so intermingled that sometimes two or more men were cutting at one. I saw Captain Snyder cut down three men in less than three minutes. He struck the first man on the head with his sword, turned and thrust his sword through the body of another, withdrew it and struck another on the head and felled him to the ground; after which he was shot in the side with a pistol-ball and wounded by a sabre-cut about two inches long above the right ear. Captain Pennebroker was shot in the leg and his horse was killed and fell on him, injuring the other leg.

Both officers were carried into the Franklin House and cared for. Our

troops had now cleared the centre square of the Confederates, and I went down from the top of the building and ran out Potomac Street to assist in caring for the wounded. I helped to carry into Squire Bearshing's house a man who it was said had been shot by Miss McGill from her father's porch when the charge was made. The soldier was a member of the Eighteenth Pennsylvania Cavalry and was from Waynesburg, Pa. He was shot in the head and died in about half an hour. The McGill family were sent across the line and took up their residence in Richmond.

The battle now became general over the whole city. The troops had mostly dismounted, and the charging columns fell back into their line, and the streets and alleys were ablaze with fire and smoke from the contending forces. One of the Connecticut boys, who had been on provost duty in the city and with whom I was well acquainted, was marching some prisoners to the rear. He handed me a musket and other accoutrements and told me to pitch in, which I did with a will. Entering Squire Smith's yard, a few doors above the Lutheran Church, I had a good position behind the iron picket fence, and was protected by the building adjoining. There I made the best possible use of my ammunition. Three of our men fell in the yard and were carried into Mr. Smith's house. We held our position for over an hour. Then the Confederate infantry came marching into the city in a solid body, filling the street from side to side, and bore down on us too strong. As my ammunition was about exhausted, I, like the rest of the men, retreated in good order.

Crossing the street, I ran into Martin H. Felheimer's house, where I left my accoutrements, and after the columns had passed I again returned to the hotel, and was never discovered as having been in the engagement excepting by Mr. Felheimer and his family and George W. Miller.

The Federals retreated from before this overwheming force of infantry down the Sharpsburg pike towards Falling Waters, where they overtook and captured another Confederate train. One outrageous act happened during the fight. The Confedrates had taken five or six prisoners in the early part of the engagement, and, as they were pressed too hard and could not get away with them, they shot the men down in the open field in front of the almshouse, which field was afterwards used as a burial-ground for soldiers.

I have never seen an account of the battle fought in Hagerstown, but as this might only be termed a skirmish in comparison to many others, yet over three hundred and fifty men were killed and wounded in the day's battle, beginning with the retreat from Boonsboro', in which ten thousand men engaged.

I called on Captain Snyder and Captain Pennebroker in the evening of the day the battle was fought. They were both in the same room at the Franklin House. Dr. Scott, of Hagerstown, had been called in and extracted the bullet from the side of Captain Snyder. I remained with him that night and bathed his wound every ten minutes with cold water.

Sunday, July 13.—General Custer made another brilliant charge into the city. This time he came in on the Leitersburg road on the rear of the Confederate army.

When Custer made the charge it was done so unexpectedly that he took about five hundred prisoners in less than ten minutes' time. The Eleventh Corps, which had advanced to the edge of the city, now marched into it in an almost simultaneous movement with Custer, and occupied the city. The Confederates were driven to their line of intrenchments, which were drawn in a semicircle about seven miles in extent, protecting the Boonsboro', Sharpsburg, Williamsport, and Clearspring pikes. No man could have appeared more cool in battle than did General Custer on this occasion. He rode by us near the head of his column, his long yellow curls flowing over his shoulders, his hat in his left hand, waving it and bowing to the ladies at the windows, who were waving handkerchiefs, while storms of bullets were sweeping his ranks. Here the armies rested three days. When General Meade held a council of war and was overruled

as to the propriety of attacking the enemy, General Lee threatened that in the event of an attack he would destroy the city by turning his guns upon it. Lee recrossed the Potomac without a general engagement.

I was with Captain Snyder when General Custer charged into the city. He became so excited that he got out of his bed, wrapped a blanket around himself, and walked out on the veranda to see his old comrades, and in so doing irritated his wound, which mortified, and this caused his death in a few days. Captain Snyder was a brave and daring officer, and was much admired for his handsome appearance and manly conduct. He had been on duty for a while in Hagerstown, and had formed the acquaintance of many of the fair sex of the city, and he told me that it was by his special request that Custer allowed him the privilege of leading the charge on July 7, because of the many favors bestowed upon him by the ladies of Hagerstown.

After the smoke of battle had passed away many of the window shutters, porches, and signs in front of places of business bore evidence of the terrible conflict, as some of them were literally riddled with bullet-holes. The brick house adjoining Mr. Smith's, where we endeavored to hold the fort, stood out on the bend of the road, and in line of the street leading to the centre square. The side of this house caught many of the bullets intended for us, and it stands there to-day scarred and marred with scores of bullet-holes as a monument of the battle.

W. W. Jacobs.

Representative Burrell, of Illinois, enjoys what is a proud distinction to a good Republican. He has lived in White County, Illinois, since 1834, and White County is so solidly Democratic that, excepting Mr. Burrell, there has never been a Republican elected in it in all its history. He was elected county judge in 1873 and re-elected in 1877. He was elected sheriff in 1886, and now has come to Congress from a district largely made up of Democratic counties, but a better Republican than Captain Burrell never sat in Congress.

One of the interesting figures in Congress is George B. McClellan. Old soldiers who sit in the galleries are always interested in finding out where he sits, and thus far he simply reflects his father's greatness. "Yes, he looks like 'Little Mac,'" said one of McClellan's old veterans the other day.

The President's message is not of general interest to women, but the Venezuelan question seems to have roused them to some extent. In the Democratic gallery, on Tuesday, there sat an ardent little Democratic woman whose husband votes with the majority, so she doesn't often talk. When the reading of the truly American document was ended and the storm of applause had died away, she turned to her escort and said, in such a pleased way, "Oh, I am so glad that the President has done something that his own party, as well as the Republicans can approve. Won't he be delighted when they tell him how much they admire his policy? He must have been so cast down at the way they have all found fault with him!"

Mr. Brice, of the hyacinthine locks, now wears his carnation in solitary glory, "the last rose of summer left blooming alone," as it were. Very few of the members of Congress seem to care for flowers, but some little woman who has a husband in Congress does, and she was determined that the offering to her husband on his first occupancy of his seat in the honorable body should be one that he could keep on the parlor centre-table, so an elaborate tower-like structure was planned, a ladder with running vines, stopping at the next to the top round, in a suggestive manner, all of bright manufactured moss and bright artificial flowers. It stood on his desk all one day, and is probably retired under a glass case now.

People who imagine that Mr. Cannon, the objector, since Mr. Holman is retired to private life, is ever going to grow old ought to see him scorching down Four-

teenth Street on a bike. If he keeps on, and ever loses his job in Congress, he might start out as a bicycle expert.

JUDGE CALDERHEAD, of Kansas, was walking down the steps of the west front of the capitol, Wednesday evening, with a friend, who asked him if he had ever been in Washington before this session of Congress.

"Once," he replied, quietly. The judge is almost a Quaker in speech.

"When was that?" asked his friend.

"On the evening of June 29, 1863," he replied.

"Ah, just before the battle of Gettysburg. Did you take part in that fight?"

"No. We had just come in from Harper's Ferry. I was only just out of the hospital from a severe attack of typhoid fever. We marched from the canal landing up Pennsylvania Avenue, which was then paved with cobble-stones. My feet were tender as a baby's, and the skin as thin, and that march crippled me in no time. My feet were so sore and blistered by the time that we reached the pavement here"—they were standing by the stone posts just north of the entrance by the Peace monument—"that I thought I never had felt anything so soft and comfortable as the stone, and I crawled right up against the fence, and, hugging my musket, went to sleep, and never wakened till the sun was an hour or more high the next morning. The city has improved some since then," he added, with a smile, "and I am here under rather pleasanter auspices."

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